ISO Certified 9001-2008

*Where Quality and Customer Satisfaction are our top priority.*

*Catalog 2012-2014*
TABLE OF CONTENTS:

INTRODUCTION:

About Dudley........................................pg. II
General Information..............................pg. III
Periodic Table......................................pg. IV

CHEMICALS:

A thru Z .............................................pg. I – 100
Analytical Reagents..............................pg. AR – 1 to AR – 4
Biological Stains and Dyes.....................pg. BS&D – 1 to BS&D – 8
Fine Chemical & Intermediates..............pg. FC&I – 1 to FC&I – 4
Indicators (alphabetically).....................pg. I – 1 to I – 5
Indicators (by pH).................................pg. pH – 1 to pH – 3
Table of Conversion Factors................. Appendix
ABOUT US:

Dudley Chemical Corporation was founded in 1985 and has grown in abundance. We are a family operated chemical facility supplying companies with their chemical requirements and research products. We specialize in Biological Stains, Analytical Reagents, Dyes, Indicators, Intermediates, and Specialty Chemicals. Our focus is on customer satisfaction and our growing relationship with our customers and chemical family.

Dudley Chemical Corporation is ISO 9001:2008 certified, with quality control to ensure that chemicals, stains, intermediates, and dyes are of high quality standards. We provide a range of chemicals ranging from HPLC, Reagent, USP, and ACS specifications and follow GMP standards. A majority of our stains and dyes are certified by the Biological Stain Commission. In addition, our Certificates of Analysis and MSDS' are on our website at www.dudley-chem.com.

Our services include:
- Sourcing for hard-to-find products
- Lot Specialization
- Custom Sizes for Packaging.
- Custom Labeling

Quantity can be purchased with a packing range of 100 grams to 50 kilos net drums.

All products are available from stock with the exception of custom ordered compounds.
General Information:

Shipping: Dudley Chemical ships your orders by the means that you specify whenever possible. Certain chemicals are hazardous and do not comply with every means of shipping. Dudley has the right to change the shipping means to comply with DOT and other shipping regulations. Labeling of materials reflects regulations of the DOT for transit & shipping. Most if not all products are F.O.B Dudley Chemical Corporation.

Pricing and Terms: Pricing is confirmed at the time when a purchase order is received. Payment terms are net 30 days with established credit. Without established credit, payment terms are payment in advance of shipment.

C.I. Numbers: Stands for Color Index numbers. This is a 5-digit number given by the American Association of Textile Chemists and Colorists specific for that dye.

MSDS: Stands for Material Safety Data Sheet. This document states the chemical properties and hazards affiliated along with the product purchased. Every chemical may have hazards in different severities, and should be handled with care and caution. Dudley Chemical tries to ensure all information onto their MSDS for an individual to make a calculated decision in how to handle the material thru their means of safety protocol.

CAS Numbers: CAS stands for Chemical Abstract Service. These numbers help identify products that have multiple names and synonyms with one universal number for the material.

Returns: Requests for a return must be received within 150 days of shipment and if approved those returns have to arrive within 60 days of approval otherwise the return is invalid. All returns without authorization will be refused. Dudley will attempt to work with each customer on the reasoning for their return. However all returned items without valid cause, are subject to a restocking fee of 20% of the net price. Items that are not returnable include non-salvageable material, material that is past its expiration date or an expiration date to short for resale (not less than 90 days from expiration), and special orders (including special packaging), products not purchased from Dudley.

<table>
<thead>
<tr>
<th>Period</th>
<th>Element</th>
<th>Atomic Number</th>
<th>Electron Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>H</td>
<td>1</td>
<td>[He] 1s²</td>
</tr>
<tr>
<td></td>
<td>Li</td>
<td>3</td>
<td>[He] 2s² 2p¹</td>
</tr>
<tr>
<td></td>
<td>Be</td>
<td>4</td>
<td>[He] 2s² 2p²</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>5</td>
<td>[He] 2s² 2p³</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>6</td>
<td>[He] 2s² 2p⁴</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>7</td>
<td>[He] 2s² 2p⁵</td>
</tr>
<tr>
<td></td>
<td>O</td>
<td>8</td>
<td>[He] 2s² 2p⁶</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>9</td>
<td>[He] 2s² 2p⁷</td>
</tr>
<tr>
<td></td>
<td>Ne</td>
<td>10</td>
<td>[He] 2s² 2p⁶ 3s¹</td>
</tr>
<tr>
<td></td>
<td>Na</td>
<td>11</td>
<td>[Ne] 3s¹</td>
</tr>
<tr>
<td></td>
<td>Mg</td>
<td>12</td>
<td>[Ne] 3s²</td>
</tr>
<tr>
<td></td>
<td>Al</td>
<td>13</td>
<td>[Ne] 3s² 3p¹</td>
</tr>
<tr>
<td></td>
<td>Si</td>
<td>14</td>
<td>[Ne] 3s² 3p²</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>15</td>
<td>[Ne] 3s² 3p³</td>
</tr>
<tr>
<td></td>
<td>S</td>
<td>16</td>
<td>[Ne] 3s² 3p⁴</td>
</tr>
<tr>
<td></td>
<td>Cl</td>
<td>17</td>
<td>[Ne] 3s² 3p⁵</td>
</tr>
<tr>
<td></td>
<td>Ar</td>
<td>18</td>
<td>[Ne] 3s² 3p⁶</td>
</tr>
<tr>
<td></td>
<td>K</td>
<td>19</td>
<td>[Ar] 4s¹</td>
</tr>
<tr>
<td></td>
<td>Ca</td>
<td>20</td>
<td>[Ar] 4s²</td>
</tr>
<tr>
<td></td>
<td>Sc</td>
<td>21</td>
<td>[Ar] 3d¹ 4s²</td>
</tr>
<tr>
<td></td>
<td>Ti</td>
<td>22</td>
<td>[Ar] 3d² 4s² 4p¹</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>23</td>
<td>[Ar] 3d³ 4s² 4p²</td>
</tr>
<tr>
<td></td>
<td>Cr</td>
<td>24</td>
<td>[Ar] 3d⁴ 4s² 4p³</td>
</tr>
<tr>
<td></td>
<td>Mn</td>
<td>25</td>
<td>[Ar] 3d⁵ 4s² 4p⁴</td>
</tr>
<tr>
<td></td>
<td>Fe</td>
<td>26</td>
<td>[Ar] 3d⁶ 4s² 4p⁵</td>
</tr>
<tr>
<td></td>
<td>Co</td>
<td>27</td>
<td>[Ar] 3d⁷ 4s² 4p⁶</td>
</tr>
<tr>
<td></td>
<td>Ni</td>
<td>28</td>
<td>[Ar] 3d⁸ 4s² 4p⁷</td>
</tr>
<tr>
<td></td>
<td>Cu</td>
<td>29</td>
<td>[Ar] 3d⁹ 4s² 4p⁸</td>
</tr>
<tr>
<td></td>
<td>Zn</td>
<td>30</td>
<td>[Ar] 3d¹⁰ 4s² 4p⁹</td>
</tr>
<tr>
<td></td>
<td>Ga</td>
<td>31</td>
<td>[Ar] 3d¹¹ 4s² 4p¹⁰</td>
</tr>
<tr>
<td></td>
<td>Ge</td>
<td>32</td>
<td>[Ar] 3d¹² 4s² 4p¹¹</td>
</tr>
<tr>
<td></td>
<td>As</td>
<td>33</td>
<td>[Ar] 3d¹³ 4s² 4p¹²</td>
</tr>
<tr>
<td></td>
<td>Se</td>
<td>34</td>
<td>[Ar] 3d¹⁴ 4s² 4p¹³</td>
</tr>
<tr>
<td></td>
<td>Br</td>
<td>35</td>
<td>[Ar] 3d¹⁵ 4s² 4p¹⁴</td>
</tr>
<tr>
<td></td>
<td>Kr</td>
<td>36</td>
<td>[Ar] 3d¹⁶ 4s² 4p¹⁵</td>
</tr>
<tr>
<td></td>
<td>Rb</td>
<td>37</td>
<td>[Kr] 4d¹ 5s²</td>
</tr>
<tr>
<td></td>
<td>Sr</td>
<td>38</td>
<td>[Kr] 4d² 5s²</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td>39</td>
<td>[Kr] 4d³ 5s² 4f¹</td>
</tr>
<tr>
<td></td>
<td>Zr</td>
<td>40</td>
<td>[Kr] 4d⁴ 5s² 4f²</td>
</tr>
<tr>
<td></td>
<td>Nb</td>
<td>41</td>
<td>[Kr] 4d⁵ 5s² 4f³</td>
</tr>
<tr>
<td></td>
<td>Mo</td>
<td>42</td>
<td>[Kr] 4d⁶ 5s² 4f⁴</td>
</tr>
<tr>
<td></td>
<td>Tc</td>
<td>43</td>
<td>[Kr] 4d⁷ 5s² 4f⁵</td>
</tr>
<tr>
<td></td>
<td>Ru</td>
<td>44</td>
<td>[Kr] 4d⁸ 5s² 4f⁶</td>
</tr>
<tr>
<td></td>
<td>Rh</td>
<td>45</td>
<td>[Kr] 4d⁹ 5s² 4f⁷</td>
</tr>
<tr>
<td></td>
<td>Pd</td>
<td>46</td>
<td>[Kr] 4d¹⁰ 5s² 4f⁸</td>
</tr>
<tr>
<td></td>
<td>Ag</td>
<td>47</td>
<td>[Kr] 4d¹¹ 5s² 4f⁹</td>
</tr>
<tr>
<td></td>
<td>Cd</td>
<td>48</td>
<td>[Kr] 4d¹² 5s² 4f¹⁰</td>
</tr>
<tr>
<td></td>
<td>In</td>
<td>49</td>
<td>[Kr] 4d¹³ 5s² 4f¹¹</td>
</tr>
<tr>
<td></td>
<td>Sn</td>
<td>50</td>
<td>[Kr] 4d¹⁴ 5s² 4f¹²</td>
</tr>
<tr>
<td></td>
<td>Sb</td>
<td>51</td>
<td>[Kr] 4d¹⁵ 5s² 4f¹³</td>
</tr>
<tr>
<td></td>
<td>Te</td>
<td>52</td>
<td>[Kr] 4d¹⁶ 5s² 4f¹⁴</td>
</tr>
<tr>
<td></td>
<td>I</td>
<td>53</td>
<td>[Kr] 4d¹⁷ 5s² 4f¹⁵</td>
</tr>
<tr>
<td></td>
<td>Xe</td>
<td>54</td>
<td>[Kr] 4d¹⁸ 5s² 4f¹⁶</td>
</tr>
<tr>
<td></td>
<td>Cs</td>
<td>55</td>
<td>[Xe] 5s¹</td>
</tr>
<tr>
<td></td>
<td>Ba</td>
<td>56</td>
<td>[Xe] 5s²</td>
</tr>
<tr>
<td></td>
<td>La</td>
<td>57</td>
<td>[Xe] 5s² 6s² 5f¹</td>
</tr>
<tr>
<td></td>
<td>Ce</td>
<td>58</td>
<td>[Xe] 5s² 6s² 5f²</td>
</tr>
<tr>
<td></td>
<td>Pr</td>
<td>59</td>
<td>[Xe] 5s² 6s² 5f³</td>
</tr>
<tr>
<td></td>
<td>Nd</td>
<td>60</td>
<td>[Xe] 5s² 6s² 5f⁴</td>
</tr>
<tr>
<td></td>
<td>Pm</td>
<td>61</td>
<td>[Xe] 5s² 6s² 5f⁵</td>
</tr>
<tr>
<td></td>
<td>Sm</td>
<td>62</td>
<td>[Xe] 5s² 6s² 5f⁶</td>
</tr>
<tr>
<td></td>
<td>Eu</td>
<td>63</td>
<td>[Xe] 5s² 6s² 5f⁷</td>
</tr>
<tr>
<td></td>
<td>Gd</td>
<td>64</td>
<td>[Xe] 5s² 6s² 5f⁸</td>
</tr>
<tr>
<td></td>
<td>Tb</td>
<td>65</td>
<td>[Xe] 5s² 6s² 5f⁹</td>
</tr>
<tr>
<td></td>
<td>Dy</td>
<td>66</td>
<td>[Xe] 5s² 6s² 5f¹⁰</td>
</tr>
<tr>
<td></td>
<td>Ho</td>
<td>67</td>
<td>[Xe] 5s² 6s² 5f¹¹</td>
</tr>
<tr>
<td></td>
<td>Er</td>
<td>68</td>
<td>[Xe] 5s² 6s² 5f¹²</td>
</tr>
<tr>
<td></td>
<td>Tm</td>
<td>69</td>
<td>[Xe] 5s² 6s² 5f¹³</td>
</tr>
<tr>
<td></td>
<td>Yb</td>
<td>70</td>
<td>[Xe] 5s² 6s² 5f¹⁴</td>
</tr>
<tr>
<td></td>
<td>Ac</td>
<td>89</td>
<td>[Xe] 5s² 6s² 5f¹⁵</td>
</tr>
<tr>
<td></td>
<td>Th</td>
<td>90</td>
<td>[Xe] 5s² 6s² 5f¹⁶</td>
</tr>
<tr>
<td></td>
<td>Pa</td>
<td>91</td>
<td>[Xe] 5s² 6s² 5f¹⁷</td>
</tr>
<tr>
<td></td>
<td>U</td>
<td>92</td>
<td>[Xe] 5s² 6s² 5f¹⁸</td>
</tr>
<tr>
<td></td>
<td>Np</td>
<td>93</td>
<td>[Xe] 5s² 6s² 5f¹⁹</td>
</tr>
<tr>
<td></td>
<td>Pu</td>
<td>94</td>
<td>[Xe] 5s² 6s² 5f²⁰</td>
</tr>
<tr>
<td></td>
<td>Am</td>
<td>95</td>
<td>[Xe] 5s² 6s² 5f²¹</td>
</tr>
<tr>
<td></td>
<td>Cm</td>
<td>96</td>
<td>[Xe] 5s² 6s² 5f²²</td>
</tr>
<tr>
<td></td>
<td>Bk</td>
<td>97</td>
<td>[Xe] 5s² 6s² 5f²³</td>
</tr>
<tr>
<td></td>
<td>Cf</td>
<td>98</td>
<td>[Xe] 5s² 6s² 5f²⁴</td>
</tr>
<tr>
<td></td>
<td>Es</td>
<td>99</td>
<td>[Xe] 5s² 6s² 5f²⁵</td>
</tr>
<tr>
<td></td>
<td>Fm</td>
<td>100</td>
<td>[Xe] 5s² 6s² 5f²⁶</td>
</tr>
<tr>
<td></td>
<td>Md</td>
<td>101</td>
<td>[Xe] 5s² 6s² 5f²⁷</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>102</td>
<td>[Xe] 5s² 6s² 5f²⁸</td>
</tr>
</tbody>
</table>
4-ACETAMIDOBENZALDEHYDE 99%  Product#00104

Synonyms: 4-Formylacetanilide
CAS No.:  122-85-0
Formula:  C9H9NO2

F W: 163.18
Appearance: Pale yellow crystalline powder
Assay: 99.0% minimum
Melting Point: 155 °C to 158 °C
Moisture: 0.5% maximum

4-ACETYLBENZOIC ACID  Product# 00151

Synonyms: 4-Carboxyacetophenone; 4-(1-Oxoethyl)benzoic acid
CAS No.:  586-89-0
Formula:  C9H8O3

F W: 164.16
Appearance: White to light yellow crystal powder
Solubility: Soluble in water.
Melting Point: 208-210 °C

4-ACETYL BENZONITRILE  Product#00172

Synonyms: 4'-Cyanoacetophenone
CAS No.:  1443-80-7
Formula:  C9H7NO

F W: 145.2
Appearance: White to off-white crystalline powder
Assay (GLC): 99 % minimum
Melting Point: 55-58 Deg. C (lit.)

ACID BLUE 9  C.I. 42090  Product#00220

Synonyms: Brilliant Blue FCF; C.I. 42090; Erioglaucine disodium salt; Alphazurine FG
CAS No:  3844-45-9
Formula:  C23H29Na2O12S3

F.W.: 792.85
Appearance: Dark blue to purple powder
Total Dye content: 87% minimum
(corrected for sample dried at 105 + 1 °C for 2 hours)
Loss on drying at 135 °C: 13% maximum
Chlorides and sulfates express as sodium salt
Water-insoluble matter: 0.2% maximum

Acid Blue 29  C.I. 20460  Product#00241

Synonym: Mordant Blue 82
CAS No: 5850-35-1
Formula:  C12H18N2O5S2Na2

F W: 616.50
Appearance: Dark brown to navy blue or black powder
Identification: Conforms to structure and standard
Lambda max.: 602 nm in H2O
Dye content: > 45%
Solubility: Opaque, dark blue solution
(0.1% in H2O)

ACID BLUE 40  C.I. 62125  Product#00282

Synonyms: C.I. 62125; Alizarin Direct Blue A2G
CAS No:  6424-85-7
Formula:  C22H16N3NaO6S

F W: 473.43
Appearance: Blue-black powder
Lambda max.: 610(380)nm in water
Solubility: Soluble in acetone and slightly soluble in alcohol.

ACID BLUE 45  C.I. 63010  Product#00300

Synonyms: C.I. 63010
CAS No.: 2861-02-1
Formula:  C14H8N2Na2O10S2

F W: 474.34
Appearance: Medium-purple powder
Insolubles: 1.0% maximum
Lambda max.: 594nm in water

ACID GREEN 25  C.I. 61570  Product#00381

Synonyms: Alizarin Cyanine Green G; C.I. 61570
CAS No.:  4403-90-1
Formula:  C28H20N2Na2O8S2

F W: 524.45
Appearance: Blue to dark blue
Insolubles: 1.0% maximum
Insolubles: 1.0% maximum
Lambda max.: 594nm in water

DUDLEY CHEMICAL

Phone: 1-732-886-3100  Fax: 1-732-886-3688  Email: dudley@dudley-chem.com
ACID VIOLET 17  
Product#00522

Synonyms: Coomassie * Violet R200; Formyl Violet  
C.I. No.: 42650  
CAS No: 4129-84-4  
Formula: $C_{41}H_{44}N_3O_6S_2Na$  
F.W.: 761.92  
Appearance: Dark Purple to dark green to green brown or bluish violet crystalline powder  
Identification (IR): Conforms to structure  
Dye content: > 48.0%  
UV Vis:  
543 - 549nm > 34,000  \((c = 0.02 g/l)\)  
304 - 310nm > 9,000  
250 – 256nm > 9,000  
Solubility: H2O30 mg/ml, EGME 30 mg/ml  
EtOH 6 mg/ml  

ACRIDINE ORANGE BASE  
Product#00908

Synonyms: 3,6-Bis(dimethylamino)acridine; Solvent Orange 15  
CAS No: 494-38-2  
Formula: $C_{17}H_{19}N_3$  
F.W: 265.35  
Appearance: Brown to orange-brown powder  
Identification: Complies  
Dye content: > 75%  
Lambda max.: 488 nm in methanol  
Solubility: Clear, orange to red orange solution  
(1 mg/ml 1W HCL)  

ACRIDINE ORANGE C.I. 46005  
Product#00910

Synonyms: Basic Orange 14; C.I. 46005; 3,6- 
Bis(dimethylamino)acridine hydrochloride zinc chloride double salt  
CAS No: 10127-02-3  
Formula: $C_{17}H_{20}N_3ZnCl_2$  
F.W: 622.59  
Appearance: Dark Blue-green powder  
Melting Point: 235-238 °C (lit.)  
Dye content: 85% minimum  
\((c=20 mg/l)\) at 610 nm Lambda max.  
Solubility: H2O60 mg/ml, EGME 30 mg/ml  
EtOH 2 mg/ml  

ACRIDINE ORANGE HCL  
Product#00914

Synonyms: Acridine Orange hydrochloride hydrate 99%  
CAS No: 65-61-2  
Formula: $C_{17}H_{19}N_3\cdot HCl\cdot x\cdot H_2O$  
F.W: 301.81 (anhydrous base)  
Appearance: Burnt-Orange to Brick-Red Powder and/or lumps.  
Infrared Spectrum: Conforms to Structure  
UV-Visible Spectrum: $C=0.005 G/L$ in H2O  
E492 (+/-3NM) Typically >/=35,000  
E268 (+/-3NM) Typically >/=35,000  
E230 (+/-3NM) Typically >/=14,000  
Solubility: 0.1% in H2O; Clear, Orange to Red-Orange Solution.  
Loss on Drying: 15% maximum  

ACRIDINE YELLOW G  
Product#00920

Synonyms: 2,7-Dimethylacridin-3,6-ylidine hydrochloride; C.I. 46025  
CAS No: 135-49-9  
Formula: $C_{15}H_{15}N_3\cdot HCl$  
F.W: 273.76  
Appearance: Copper to dark orange crystalline powder  
Infrared Spectrum: Conforms to structure and standard  
Dye content: ~90.0%  
Lambda max.: 442nm in water  
Elemental Analysis:  
Carbon: 57.90% - 73.70%  
Nitrogen: 13.50% - 17.20%  
Solubility(4 mg/ml in H2O): Clear, yellow to orange solution  
Loss on Drying: < 10%  

ACRIFLAVINE HYDROCHLORIDE  
Product#00965

Synonyms: Acriflavine Hydrochloride  
CAS No.: 8063-24-9  
Formula: $C_{14}H_{14}N_3Cl$  
F.W: 259.74  
Appearance: Red to orange to brown powder  
Solubility/Clarity: Completely soluble Clear orange to brown solution  
Certain Other Acridine Derivatives: To pass test  
Sulfated Ash: Maximum 1.0%
ACRIFLAVINE NEUTRAL  Product#00969

Synonyms: Acriflavine Base; Euflavine; 3,6-Diamino-10-methylacridinium chloride
CAS No: 8048-52-0
Formula: C_{14}H_{14}ClN_{3}

F.W.: 259.7

Appearance: Orange to Red-Brown powder
Identification: To Pass test
Solubility(at 50 mg/ml in water): Clear Orange solution
Water-insoluble matter: 0.5% maximum
UV-VIS Spectrum:
E(462 + /- 3nm) = 48,000 (minimum)
C=0.004 G/L in Methanol
E(262 + /- 3nm) = 50,000 (minimum)
Sulfated Ash: 3.5% maximum
Loss on drying@105°C/1 hour: 8.0% maximum
Assay for Chlorine content dried at 105°C for 2 hrs: 13.3% to 15.8%

1-ADAMANTANAMINE HCL  Product#01095

Synonyms: 1-Aminoadamantanehydrochloride; Amantadine hydrochloride
CAS No: 665-66-7
Formula: C_{10}H_{17}N*HCL

F.W.: 187.72

Appearance: White to off-white powder
Assay: 99.0% min.
Identification: Conforms to standard and structure
Melting Point: >300 Deg. C
pH (1 g in 5 ml of water): 3.0 – 5.5
Clarity of Solution: Clear to nearly colorless solution
Heavy metals (as Pb): <10 ppm
Chromatographic Purity: a. Individual impurity: ≤ 0.3%
b. Total impurity: ≤ 1.0%
Organic Volatiles impurities: To pass test
Residual Solvent (acetone): ≤ 5000 ppm

1-ADAMANTANAMINE SULFATE  Product#01100

Synonyms: 1-Aminoadamantane sulfate; Adamantylamine sulfate; Amantadine Sulfate; tricycle[3.3.1.13.7]Decan-1-Amine sulfate
CAS: 31377-23-8
Formula: C_{10}H_{17}N*H_{2}S

F.W.: 249.33

Appearance: White Fine Crystalling Powder
Infrared Spectometry: Authentic
Assay: > 98.5%

1-ADAMANTANE 99%  Product#01201

Synonyms: None known
CAS No: 281-23-2
Formula: C_{10}H_{16}

F.W.: 136.24

Appearance: White to beige crystals or crystalline powder
Identification (IR): Conforms to structure and standard
Assay (GC): 99.0% Min.
Water (K.F. Titration): 0.10% Max.
Melting Range: 266-268 °C

ADAMANTANE CARBOXYLIC ACID  Product#01210

Synonyms: Adamantane-1-carboxylic acid
CAS No: 828-51-3
Formula: C_{12}H_{16}O_{2}

F.W.: 180.25

Appearance: White to light yellow powder and/or chunks
Assay (GC): 97% minimum
Identification: To Pass Test
Melting Point: 206-208 Deg. C
Solubility(50 mg/ml, 1N HCl): Clear, colorless solution
Appearance: White crystalline powder
Assay (titration): 99.0% Minimum
Melting Range: 172-174 Deg. C
Loss on drying (P2O5): 0.50% Maximum
Identification (IR Spectrum): Complies to standard
Clarity of solution (10% in Ethanol): To pass test
Sulfated ash: 0.10% Maximum

1-ADAMANTANEETHANOL 98%  
Product#01214
Synonyms: 2-(1-Adamantyl)ethanol
CAS No: 6240-11-5
Formula: C12H22O

F.W.: 180.29
Appearance: White to Off-White Powder, Chunks or Solid
Identification (IR Spectrum): Conforms to structure and standard
Proton NMR Spectrum: Conforms to structure
Gas Liquid: 97.5% (Minimum)

1-ADAMANTANOL 99%  
Product#01220
Synonyms: 1-Hydroxyadamantane; Tricyclo[3.3.1.1(3,7)decane-1.01
CAS No: 768-95-6
Formula: C10H16O

F.W.: 152.24
Appearance: White to off white powder, granules, crystals, crystalline powder and/or chunks
Identification (IR): Conforms to structure and standard
Assay: 98.50% Minimum
Melting Range: 274-280 ° C
Solubility (5% in ethanol): Clear, colorless to faint yellow solution
Sulfated Ash: 0.1% Maximum

2-ADAMANTANOL  
Product#01226
Synonyms: 4-Chlorodiphenyl Ether
CAS No: 700-57-2
Formula: C12H18O

F.W.: 152.24
Appearance: White to yellow powder, granules, crystals, crystalline powder and/or chunks
Assay: 98.0% minimum
Melting Point: 260 - 265 °C
Sulfated Ash: 0.1% Maximum

1-ADAMANTYL METHYL KETONE  
Product#01240
Synonyms: 1-Acetyl-tricyclo[3.3.1.1(3,7)decane:
1-Acetyladamantane
CAS No: 1660-04-4
Formula: C10H16O

F.W.: 178.28
Appearance: White to off-white crystalline powder
Identification: Complies with standard
Assay (GC): 99.0% Minimum
Melting Point: 270 °C Minimum
Sulfated Ash: 0.10% Maximum
Clarity (10%, dichloromethane): Colorless transparent solution
Solubility: Insoluble in water

ALCIAN BLUE 8GX CERTIFIED  
Product#02701
Synonyms: Ingrain Blue 1
CAS No: 33864-99-2
Formula: C66H68C14CuN16S4

F.W.: 1298.88
Appearance: Dark Blue Powder
Identification: Passes Test
Solubility: Dark Blue Solution @ 4MG Plus 4 mL of water
Dye Content: 50% Minimum
Absorption Max (Spectroscopy): 615 nm in water

ALCIAN YELLOW C.I. 12840  
Product#02704
Synonyms: Ingrain Yellow 1; C.I. No.: 12840
CAS No: 61968-76-1
Formula: C40H46Cl2N8S4

F.W.: 838.03
Appearance: Rust-colored powder
Identification: To pass test
Dye Content: Minimum 55%
Lambda max.: 388nm in methanol
Solubility: H₂O 20 mg/ml, EGME 30 mg/ml, EtOH 10 mg/ml

ALIZARIN C.I. 58000  
Product#02782

Synonyms: Mordant Red 11; 1,2-Dihydroxy-9,10-Anthraquinone; 1,2-dihydroxyanthroquinone
CAS No.: 72-48-0
Formula: C₁₄H₈O₄

F.W.: 240.21
Appearance: Dull orange powder
Dye Content: 97% Minimum
Melting Point: 287-289 °C
Loss on drying: 1.5% Maximum
Sulfated Ash: 1.0% Maximum
Visual Transition Interval: From pH 5.5 (yellow) to pH 6.8 (violet) and from pH 10.1 (violet) to pH 12.1 (purple)

ALIZARIN COMPLEXONE 2 HY  
Product#02793

Synonyms: Alizarin-3-methyliminodiacetic acid; Alizarin Fluorine Blue; 3,4-Dihydroxy-Anthraquinon-2-yl-methyliminodiacetic Acid.
CAS No.: 3952-78-1
Formula: C₁₉H₁₅N₂O₈·2H₂O

F.W.: 421.36
Appearance: Yellow to orange to brown powder
Lambda Max.: 425 - 430nm in methanol
Solubility(10 mg/ml in 1M Sodium Hydroxide): Blue to purple solution
Water (K.F.): < 9.5%
Assay: 97% - 103% (on dry substance)

ALIZARIN RED 5 CERTIFIED  
Product#02851

Synonyms: Mordant Red 3, Sodium alizarin sulfonate;
Alizarin sulfonic acid sodium salt; Alizarin carmine; 3,4-Dihydroxy-9,10-dioxo-2-anthracenesulfonic acid sodium salt.
CAS No.: 130-22-3
Formula: C₁₄H₇O₇SNa

F.W.: 342.26
Appearance: Yellow to orange to brown powder
Identification: Conforms to structure and Standard
Loss on Drying @110 Deg. C: 10.0% Maximum

DUDLEY CHEMICAL
Solubility (0.1% in H₂O): Clear yellow liquid
Visual transition Interval: From pH 3.5 (yellow) to pH 6.5 (pink) and From pH 9.4 (orange) to pH 12.0 (violet)

ALIZARIN YELLOW GG  
Product#02861

Synonyms: Mordant Yellow, Alizarin Yellow 2G, 5-(3-Nitrophenylazo)salicylic acid sodium salt.
CAS No.: 584-49-9
Formula: C₁₃H₈N₃NaO₅

F.W.: 309.21
Appearance: Yellow to orange to brown powder
Infrared Spectrum: Conforms to Standard
Lambda Max.: 359-365 nm
Loss on Drying: 5% maximum
Visual transition Interval: From pH 10 – Yellow to pH 12 - Orange

ALIZARIN YELLOW R FREE ACID  
Product#02869

Synonyms: Mordant Orange 1; Alizarin Yellow R Sodium Salt; 5-(p-Nitrophenylazo)Salicylic Acid Sodium Salt; Sodium p-Nitrobenzenazosaliclylate; C.I. No: 14030
CAS No.: 2243-76-7
Formula: O₂N₄C₆H₄N=NC₆H₃-N⁺(OH) CO₂⁻H

F.W.: 287.23
Appearance: Reddish Orange Powder
Solubility(0.1% IN Ethanol): Clear Yellow Solution
Absorptivity In Ethanol: (A 1%/1cm) max-385nm-1004
Loss on drying(110 deg.C): Max. 3%
Melting Point: >300 deg. C
Dye Content: Min. 75%

ALIZARIN YELLOW R SODIUM SALT  
Product#02872

Synonyms: Mordant Orange 1; Alizarin Yellow R Sodium Salt; 5-(p-Nitrophenylazo)Salicylic Acid Sodium Salt; Sodium p-Nitrobenzenazosaliclylate; C.I. No: 14030
CAS No.: 2243-76-7
Formula: O₂N₄C₆H₄N=NC₆H₃-N⁺(OH) CO₂⁻H

F.W.: 287.23
Appearance: Reddish Orange Powder
Solubility(0.1% IN Ethanol): Clear Yellow Solution
Absorptivity In Ethanol: (A 1%/1cm) max-385nm-1004
Loss on drying(110 deg.C): Max. 3%
Melting Point: >300 deg. C
Dye Content: Min. 75%
**ALKALI BLUE 6B**

Synonyms: Acid Blue 110  
CAS No.: 30586-13-1  
Formula: C32H28N3NaO4S  
F.W.: 573.65  
Appearance: Dark blue powder  
Dye content: ~80%  
Visual transition interval: From pH 9.4 (blue) to pH 14.0 (red)  
Lambda max.: 603nm in methanol + 1 ml 1N hydrochloric acid

**ALLURA RED**

Synonyms: 6-Hydroxy-5-((6-methoxy-4-sulfo-m-tolyl)azo)-2-naphthalene sulfonic acid disodium salt;  
2-Naphthalenesulfonic acid, 6-hydroxy-5-(2-methoxy-5-methyl-4-sulfophenyl)azo)-, disodium salt.  
CAS No.: 25956-17-6  
Formula: C18H14N2Na2O8S2  
F.W.: 496.42  
Appearance: Red to Maroon powder  
Total Dye content by mass: >85.0%  
Subsidiary dyes by mass: <3.0%  
Water insoluble matter: <0.2%  
Arsenic (As) mg/kg <3.0  
Lead (Pb) mg/kg <10.0  
Mercury (Hg) mg/kg <1.0  
Chromium (Cr) mg/kg <15.0  
Cadmium (Cd) mg/kg <1.0  
Heavy Metals mg/kg <40.0

**ALUMINON ACS**

Synonyms: Aurin Tricarboxylic Acid, [tri] Ammonium Salt; C.I.43810  
CAS No.: 569-58-4  
Formula: C22H23N3O9  
F.W.: 473.44  
Appearance: Dark Red Crystalline Powder  
Sensitivity for Aluminum: Passes Test  
Insoluble Matter: 0.1% maximum  
Residue after Ignition: 0.2% maximum  
Melting Point: 220°C to 225°C  
Solubility 100 mg/ml, H2O: Opaque, dark red solution

**ALUMINUM AMMONIUM SULFATE ACS**

Synonyms: Ammonium aluminum dodecahydrate;  
Aluminum ammonium disulfate dodecahydrate;  
Aluminum ammonium disulfate, 12 hydrate, sulfonic acid  
aluminum ammonium salt (2:1:1), dodecahydrate  
CAS No: 7784-26-1  
Formula: AlNH4(SO4)2 * 12H2O  
F.W.: 453.33  
Appearance: White crystals  
Assay: 98 - 102%  
Insoluble Matter: 0.005% maximum  
Chloride (Cl): 0.001 %  
Potassium (K): 0.05 %  
Calcium (Ca): 0.05 %  
Heavy Metals (as Pb): 0.001 %  
Iron (Fe): 0.001 %  
Sodium (Na): 0.01 %  
Clarity of Solution (10 gram/150 ml of H2O + 5 ml of 25% H2SO4): Clear & Complete

**ALUMINUM POTASSIUM SULFATE ACS**

Synonyms: Sulfuric acid, aluminum potassium salt (2: 1:1), dodecahydrate; potassium alum dodecahydrate; Alum postassium USP powder TAC; Potassium alum; Potash alum; Alum; Kalinite  
CAS No: 7784-24-9  
Formula: AlK(SO4)2 * 12H2O  
F.W.: 474.39  
Appearance: White crystals  
Assay: 98 - 102%  
Melting Point: 92 C  
Insoluble Matter: 0.005% maximum  
Chloride: 5 ppm  
Ammonium: 0.005 %  
Heavy Metals: 0.001 %  
Iron: 0.001 %  
Sodium: 0.02 %

**ALUMINUM SULFATE 18 HY ACS**

Synonyms: Alum Potassium alum Potassium aluminum sulfate dodecahydrate  
CAS No: 7784-24-9  
Formula: AlK(SO4)2 * 12H2O  
F.W.: 666.43  
Appearance: White crystals  
Assay: 98 - 102%  
Insoluble Matter(13.3% Dil H2SO4): ≤0.01%  
Chloride Content: ≤0.005%

---

DUDLEY CHEMICAL  
Product#02925

Phone: 1-732-886-3100  Fax: 1-732-886-3688  Email: dudley@dudley-chem.com
AMARANTH  Product#03021

Synonyms: Acid Red 27; Acetacid Red 2BR; Acilan Red SE; Azo Red R; Azo Rubine SF; Bordeaux S; 3-Hydroxy-4-((4-sulfo-1-naphthalenyl)azo)-2,7-aphthalenedisulfonic acid trisodium salt.

CAS No: 915-67-3
Formula: C_{20}H_{11}N_{2}Na_{3}O_{10}S_{3}
F.W.: 604.47

Appearance: Brown to brown with a red cast powder
Total coloring matter Calculated as the sodium Salt: 85% minimum
Water-insoluble matter: 0.20% maximum
Subsidiary dyes: 3.0% maximum
Solubility(10 mg/ml in H2O): Clear dark red to red-brown solution
Cadmium (mg/kg): 1.0 maximum
Mercury (mg/kg): 1.0 maximum
Arsenic (mg/kg): 3.0 maximum
Lead (mg/kg): 10.0 maximum
Heavy metals (as Pb) (mg/kg): 40.0 maximum

AMIDO BLACK 10B C.I. 20470  Product#03112

Synonyms: Naphthol Blue Black; Amido Schwarz; C.I. No.: 20470 4-Amino-5-Hydroxy-3-(p-nitrophenylazo)-6-(phenylazo)-2,7-naphthalenedisulfonic acid, disodium salt
CAS No: 1604-48-8
Formula: C_{22}H_{14}N_{6}Na_{2}O_{9}S_{2}
F.W.: 616.50

Appearance: Dark brown to reddish-black powder
Identification: To conform to structure and standard Absorptivity 1%/1cm at Lambda Max 618.0 nm: 750 - 960
Solubility 0.1% (dist.water): Clear blue solution
Loss on drying@ 105 deg. C: 10.0% maximum

9-AMINOACRIDINE HCL  Product#03141

Synonyms: Acramine Yellow; Monacrin
CAS No: 52417-22-8
Formula: C_{2}H_{10}N_{4}HCl.H_{2}O
F.W.: 248.71

4-AMINOANTIPYRINE ACS  Product#03148

Synonyms: Ampyrene
CAS No: 83-07-8
Formula: C_{11}H_{13}N_{3}O_{2}
F.W.: 203.25

Appearance: Light yellow to tan fine crystals
Identification: To pass test
Melting Point: 107-109 deg. C
Assay: 98.0% minimum
Sensitivity to phenol: Passes Test
Residue after Ignition: 0.10% maximum
Loss on drying: 0.5% maximum
Clarity of solution(1g/20ml water): Clear solution
Clarity of solution(1g/20ml EtOH): Clear solution

2-AMINO-6-FLUOROBENZOTHIAZOLE  Product#03150

Synonyms: 6-Fluoro-2-benzothiazolamine
CAS No: 348-40-3
Formula: C_{7}H_{5}FN_{2}S
F.W.: 168.19

Appearance: Off-White to tan Powder
Assay: 99.0% minimum
Melting Point: 183-184 °C
Solubility 1% in methanol at room temperature: Clear, straw-colored solution.

1-AMINO-2-NAPHTHOL HCL  Product#03152

Synonyms: 2-Hydroxy-1-naphthylamine Hydrochloride
CAS No.: 1198-27-2
Formula: H_{2}NC_{10}H_{6}OH.HCl
F. W.: 195.65

Appearance: Off-white to beige powder
Moisture: 1.0% maximum
Assay (HPLC): 90.0% minimum
Melting Point: >250 C
Salt: 1.0% maximum
Solubility (5% in methanol): Clear, brownish solution
1-AMINO-2-NAPHTHOL-4- SULFONIC ACID ACS

Product#03156

Synonyms: 4-Amino-3-hydroxy-1-naphthalene Sulfonic Acid
CAS No: 116-63-2
Formula: H₂N(HO)C₁₀H₈SO₃H

F.W.: 239.25

Appearance: White to slightly brownish-pink to light purple powder
Assay: ≥ 98.0%
Solubility in sodium carbonate: To Pass Test
Residue after ignition: 0.1 % maximum
Sulfate (SO₄): 0.2 % maximum
Sensitivity to phosphate: To Pass Test

2-AMINO-3-CHLOROBENZOIC ACID

Product#03170

Synonyms: 3-Chloroanthranilic Acid
CAS No: 6388-47-2
Formula: C₇H₆CINO₂

F.W.: 171.6

Appearance: White to tan, yellow or grey crystalline powder
Assay: 98% minimum
Loss on drying: 0.50% maximum
Melting Point: 190-194 Deg. C

2-AMINO-5-CHLOROBENZOIC ACID 98%

Product#03173

Synonyms: 5-Chloroanthranilic Acid
CAS No.: 635-21-2
Formula: C₇H₆ClNO₂

F.W.: 184.6

Appearance: White to off-white powder
Assay: 99% Minimum
Melting Point: 198 - 202 Deg.C (lit.)

2-(2-AMINOETHYL)PYRIDINE

Product#03182

Synonyms: 2-Pyridylethylamine
CAS No.: 2706-56-1
Formula: C₇H₁₀N₂

F.W.: 170.18

Appearance: Yellow-Grey to Light Brown powder
Infrared Spectrometry: Authentic
Melting Point: 209°C to 213°C
Assay Acid: >97.5%
Separat. Techn. HPLC: >97.5%

DUDLEY CHEMICAL
2-AMINO-5-METHYLBENZOIC ACID

Synonyms: (5-METHYLANTHRANILIC ACID)
CAS No.: 2941-78-8
Formula: C_{6}H_{5}N(CH_{3})CO_{2}H

F.W.: 151.17

Appearance: White to slightly yellow, or tan crystalline powder
Infrared Spectrum: Conforms to structure and standard
Assay (HPLC): 99.0% minimum
Melting Point: 174 °C to 179 °C
Loss on drying: <2.5%
Solubility (2.5% in Acetone): Clear green, yellow to brown solution.

AMMONIUM ACETATE ANHYDROUS ACS

Synonyms: Acetic Acid, ammonium salt
CAS No: 631-61-8
Formula: CH_{3}COONH_{4}

F. W.: 77.08

Appearance: White Fine Crystals
Assay: ~97% minimum
pH of a 5% Solution: 6.7 - 7.3 at 25 °C
Insoluble Matter: 0.005% maximum
Residue after Ignition: 0.01% maximum
Chloride (Cl): 5 ppm maximum
Nitrate (NO3): 0.001% maximum
Sulfate (SO4): 0.001% maximum
Heavy Metals (as Pb): 5 ppm maximum
Iron (Fe): 5 ppm maximum

AMMONIUM BROMIDE ACS

Synonyms: Hydrobromic Acid Monoammoniate
CAS No: 12124-97-9
Formula: NH_{4}Br

F. W.: 97.95

Appearance: White Crystalline powder
Assay: 99.0% minimum
pH of a 5% solution at 25 °C: 4.5-6.0
Insoluble matter 0.005% maximum
Residue after ignition 0.01% maximum
Bromate (BrO3) 0.002% maximum
Chloride (Cl) 0.2% maximum
Iodide (I) To Pass Test
Sulfate (SO4) 0.005% maximum
Barium (Ba) 0.002% maximum
Heavy Metals (as Pb) 5 ppm maximum
Iron (Fe) 5 ppm maximum

AMMONIUM CHLORIDE ACS

Synonyms: Ammonium Chloratum; Ammonium Chloridum; Ammonium Muriate; Sal ammonia, Slamiae
CAS No: 12125-02-9
Formula: NH_{4}Cl

F. W.: 53.49

Appearance: White crystalline powder
Assay: >99.5%
pH of a 5% solution at 25 °C: 4.5-5.5
Insoluble matter 0.005% maximum
Residue after ignition 0.01% maximum
Calcium (Ca) 0.001% maximum
Magnesium (Mg) 5 ppm maximum
Heavy metals (as Pb) 5 ppm maximum

4-AMINO-3-NITROPHENOL, 98%

Synonyms: 4-Hydroxy-2-nitroaniline
CAS No.: 610-81-1
Formula: C_{6}H_{6}N_{2}O_{3}

F. W.: 154.13

Appearance: Dark Red to maroon crystalline powder
Infrared Spectrum: To Conform to structure and standard
Assay (HPLC): 98.0% Minimum
Melting Point: 151-153 °C
Loss on Drying: 1.00% Maximum
**AMMONIUM FLUORIDE ACS**

Product# 03255

Synonyms: Neutral Ammonium Fluoride  
CAS No: 12125-01-8  
Formula: \( \text{NH}_4\text{F} \)  

Appearance: White crystalline powder  
Assay: \( \geq 98.0\% \ \text{NH}_4\text{F} \)  
Insoluble Matter: < 0.005%  
Residue after Ignition: < 0.01%  
Solubility in water: 45.3 g/100 ml (25°C)  
Chloride (Cl): 0.001% maximum  
Sulfate (SO₄): 0.005% maximum  
Heavy Metals (as Pb): 5 ppm maximum  
Iron (Fe): 5 ppm maximum  

**AMMONIUM MOLYBDATE TETRAHYDRATE ACS**

Product#03262

Synonyms: Molybdic acid, hexammonium salt; Ammonium Heptamolybdate Tetrahydrate; Ammonium Molybdate (II); Ammonium paramolybdate.  
CAS No: 12054-85-2  
Formula: \( (\text{NH}_4)_6\text{MoO}_24\cdot4\text{H}_2\text{O} \)  

Appearance: White to colorless to slightly greenish or yellow crystalline powder or crystals  
Assay: 99.30 - 101.8%  
Insoluble Matter: < 0.005%  
Residue after Ignition: < 0.025%  
Chloride (Cl): < 0.005%  
Sulfate (SO₄): < 0.005%  
Heavy Metals (as Pb): < 5 ppm  
Iron (Fe): < 2 ppm  

**AMMONIUM OXALATE MONOHYDRATE ACS**

Product#03282

Synonyms: Ethanedioic Acid, Diammonium Salt Monohydrate; Oxalic Acid Diammonium Salt  
CAS No: 6009-70-7  
Formula: \( (\text{NH}_4)_2\text{C}_2\text{O}_4\cdot\text{H}_2\text{O} \)  

Appearance: Colorless to White crystalline powder  
Assay: > 98.0%  
Identification: Conforms to structure  
Insoluble Matter: ≤ 0.005%  
Residue after Ignition: ≤ 0.025%  
Chloride (Cl): ≤ 0.005%  
Sulfate (SO₄): ≤ 0.005%  
Heavy Metals (as Pb): ≤ 5 ppm  
Iron (Fe): ≤ 3 ppm  

**ANILINE BLUE CERTIFIED**

Product#03350

Synonyms: Acid Blue 93; Methyl Blue; C.I. No.: 42780  
CAS No.: 28631-66-5  
Formula: \( \text{C}_3\text{H}_2\text{N}_3\text{O}_3\text{S}_3\text{Na}_2 \)  

Appearance: Brownish-purple crystalline powder with metallic lustre  
Solubility (in water): Soluble  
Lambda max.: 594-610 nm in water  

**ANTIPYRINE**

Product#03500

Synonyms: 2,3-Dimethyl-1-phenyl-3-pyrazolin-5-one; Phenazone  
CAS No.: 60-80-0  
Formula: \( \text{C}_11\text{H}_12\text{N}_2\text{O} \)  

**DUDLEY CHEMICAL**

Phone: 1-732-886-3100  
Fax: 1-732-886-3688  
Email: dudley@dudley-chem.com
Appearance: White or primrose yellow crystalline powder
Identification: Positive
Assay: 99.0 - 100.5%
Melting Point: 110 – 112.5 Deg. C
Loss on drying: < 1.0%
Heavy metals (as Pb): < 0.002%
Residue on Ignition: < 0.15%
Related compounds: Passes Test

ANTHRACENE 99%

Synonyms: Green oil, Anthracin, Paranaphthalene; Polycyclic aromatic hydrocarbon (PAH)
CAS No.: 120-12-17
Formula: C_{14}H_{10}
F.W.: 178.23
Appearance: White to off-white to pale-yellow crystalline powder
Assay: 99% minimum
Melting Point: 215-219 °C
Solubility (2% in Toluene): Clear colorless solution.
IR Spectroscopy: Conforms to Standard

ANTHRONE ACS

Synonyms: 9(10H)-Anthracenone
CAS No: 90-44-8
Formula: C_{14}H_{10}O
F.W.: 194.23
Appearance: Off-white to light yellow to light greenish-yellow crystalline powder
Melting Point: 153 - 159 °C
Sensitivity to Carbohydrates: To Pass test
Absorbance of reagent solution: To Pass test
Solubility in ethyl acetate: To Pass test

AURAMINE O C.I. 41000 CERTIFIED

Synonyms: Basic Yellow 2; C.I. 41000
4,4'-(Imidocarbonyl)bis-(N,N-dimethylaniline) monohydrochloride
CAS No: 2465-27-2
Formula: C_{19}H_{18}N_{2}+HCl
F.W.: 303.84
Appearance: Yellow Powder
Dye content: ~80 % minimum
Melting Point: >250 Deg. C (dec.)
Spectroscopy: Peak 432 nm water

AZURE A C.I. 52005

Product#04251
Synonyms: 3-Amino-7-dimethylamino)phenothenizin-5-ium chloride;
7-(Dimethylamino)-3-amino-3H-phenthothiazine hydrochloride;
C.I. 52005;
CAS No.: 531-53-3
Formula: C_{16}H_{15}CIN_{3}S
F.W.: 291.80
Appearance: Dark Green Crystalline Powder
Assay: 70 – 80 %
Solubility (0.1% Aq): Clear blue solution
Loss on drying at 110 Deg.C (1 hour): < 8.0%
Absorptivity 1%/1cm, At Lambda max. 633.0 nm: > 1120
Melting Point: 290 deg. C (dec.)
Solubility: Soluble in water, Methanol, and glycerol,
Slightly soluble in ethanol.

AZURE B (AZURE 1) C.I. 52010

Product#04255
Synonyms: N,N,N'-Trimethylthionin; Azure I; Methyleneazure;
C.I. 52010
CAS No.: 531-55-5
Formula: C_{15}H_{16}CIN_{3}S
F.W.: 305.83
Appearance: Dark green or black powder
Assay: Minimum 75%
Solubility (0.1% Aq): Clear blue solution
Absorptivity 1% 1cm At Lambda max. 645nm: > 1500
Loss on drying at 110 deg. C (1Hr.): 8% maximum

AZURE C

Product#04258
Synonyms: 3-Amino-7-Methylaminophenothiazin-5-ium chloride
CAS No.: 531-57-7
Formula: C_{13}H_{12}CIN_{3}S
F.W.: 277.78
Appearance: Blackish-green powder
IR Spectrum: Conforms to structure
Solubility (0.1 Aq): Clear blue violet solution
Absorptivity 1% 1cm at Lambda Max 615nm: 820 - 824
Loss on drying at110 deg. C (1 Hr.): Max. 9%

AZURE II

Product#04263
Synonyms: 3-Dimethylamino-7-methylamino-phenthiazonium-
tetrafluoroborate
CAS No.: 37247-10-2
Formula: C_{18}H_{18}N_{2} · C_{25}H_{18}N_{2} · 2 Cl
AZURE II EOSINATE  
Product#04267

Synonyms: None known  
CAS No.: 53092-85-6  
Formula: BaCO₃  
CAS No: 513-77-9  

Assay: 99.0 – 101.0%  
Appearance: White powder  
Iron (Fe): 0.002% maximum  
Heavy metals (as Pb): 0.001% maximum  
Strontium (Sr): 0.2% maximum  
Sodium (Na): 0.02% maximum  
Potassium (K): 0.005% maximum  
Calcium (Ca): 0.05% maximum  
Oxidizing substances (as NO₃): 0.005% maximum  
Chloride (Cl): 0.002% maximum  
Water-soluble titrable base: 0.002 meq/g maximum  
Residue after ignition (as sulfate): 35.0 - 38.0%  
Clarity of solution: To pass test  
Aqueous solubility: Slightly soluble  
Sulfide (S): 0.001% maximum  
Peroxide (H₂O₂): 0.005% maximum  
Water-soluble titrable base: 0.002 meq/g maximum  
Aqueous solubility: Slightly soluble  

BARIUM ACETATE ACS  
Product#05031

Synonyms: Barium acetate, barium salt; Barium diacetate  
CAS No: 543-80-6  
Formula: (CH₃COO)₂Ba  
F. W.: 255.42  

Appearance: White crystalline powder  
Assay: 99.0 – 102.0%  
Insoluble matter: 0.01% maximum  
Chloride (Cl): 0.001% maximum  
Oxidizing substances (as NO₃): 0.005% maximum  
Calcium (Ca): 0.05% maximum  
Potassium (K): 0.003% maximum  
Sodium (Na): 0.005% maximum  
Strontium (Sr): 0.2% maximum  
Heavy Metals (as Pb): 5 ppm maximum  
Iron (Fe): 0.001% maximum  

BARIUM CHLORIDE DIHYDRATE ACS  
Product#05071

Synonyms: Barium dichloride  
CAS No: 10326-27-9  
Formula: BaCl₂·2H₂O  
F. W.: 244.26  

Appearance: White to colorless crystals  
Assay: >99.0 %  
pH of a 5% solution: 5.2 - 8.2 at 25 Deg. C  
Insoluble matter: 0.005% maximum  
Oxidizing Substances (as NO₃): 0.005% maximum  
Chloride (Cl): 0.002% maximum  
Oxidizing Substances (as NO₃): 0.005% maximum  

BARIUM DIPHENYLAMINESULFONATE ACS  
Product#05084

Synonyms: p-Diphenylaminesulfonic Acid barium salt  
CAS No: 6211-24-1  
Formula: C₂₉H₂₀BaN₂O₈S₂  
F. W.: 633.88  

Appearance: White to colorless crystals  
Residue after ignition (as sulfate): 35.0 - 38.0%  
Clarity of solution: To pass test  
Aqueous solubility: Slightly soluble  
Sensitivity as Redox Indicator: To pass test  

BARIUM CARBONATE ACS  
Product#05066

Synonyms: Carbon Acid, barium salt  
CAS No: 513-77-9  
Formula: BaCO₃  
F. W. 197.34  

Appearance: White powder  
Assay: 99.0-101.0%  

BARIUM NITRATE ACS  
Product#05120

Synonyms: Barium dinitrate; Nitric Acid barium salt, nitrobarite  
CAS No: 10022-31-8  
Formula: Ba(NO₃)₂  
F. W.: 261.35  

Appearance: White crystalline powder  

DUDLEY CHEMICAL  
300 SOUTH DUDLEY RD  
FAIRFIELD, NJ 07006  
Phone: 1-732-886-3100  
Fax: 1-732-886-3688  
Email: dudley@dudley-chem.com
Identification: To pass test
Assay: >99.0%

**BASIC BLUE 99**

Synonyms: 3-[(4-amino-6-bromo-5,8-dihydro-1-hydroxy-8-imino-5-oxo-2-naphthalenyl)amino]-N,N,N-trimethylbenzenaminium chloride

CAS No.: 68123-13-7

Formulation: C₁₉H₂₀BrN₄O₂Cl

F.W.: 451.74

Appearance: Dull blue crystalline powder
Assay (HPLC): > 99.0%
Iron: < 500 ppm

**BASIC BROWN 17**

Synonyms: JAROCOL Siena Brown; Basic brown 17 (C.I. 12251); 1-(3-Nitro-4-aminophenylazo)-7-(trimethylaminio)-2-naphthalenaminium chloride

CAS No.: 68391-32-2

Formula: C₁₉H₂₂N₅O₂Cl

F.W.: 401.85

Appearance: Dark Brown almost Black crystalline powder
Assay (HPLC): > 90.0%
Iron: < 100 ppm

**BASIC RED 76**

Synonyms: 2-Naphthalenaminium, 7-hydroxy-8-[(2-methoxyphenyl)azo]-N,N,N-trimethyl-, chloride; 7-Hydroxy-8-[(2-methoxyphenyl)azo]-N,N,N-trimethyl-2-naphthalenaminium chloride; 7-Hydroxy-8-[(2-methoxyphenyl)azo]-2-naphthyltrimethylammonium chloride; 7-Hydroxy-8-[(2-methoxyphenyl)azo]-7-hydroxy-2-naphthyltrimethylammonium chloride; 7-Hydroxy-8-[(2-methoxyphenyl)azo]-7-hydroxy-2-naphthyltrimethylammonium chloride

CAS No.: 68391-30-0

Formula: C₂₀H₂₂N₃O₂Cl

F.W.: 377.91

Appearance: Orange crystalline powder
Assay (HPLC): > 98.0%
Iron: < 100 ppm
O-Anisidine: < 10 ppm

**BATHOCUPRIONE**

Synonyms: 2,9-Dimethyl-4,7-diphenyl-1,10-phenanthroline, 98%

CAS No: 4733-39-5

Formula: (CH₃)₂(C₆H₅)₂C₁₂H₄N₂

F.W.: 360.44

Identification (IR): To conform to standard
Assay: Min 98%
Melting Point: 280 - 281 deg. C
Suitable for determination of Cu: Passes Test

**BATHOPHENANTHRONE**

Synonyms: 4,7-Diphenyl-1,10-phenanthroline

CAS No: 1662-01-7

Formula: C₂₄H₁₈N₂

F.W.: 332.39

Identification (IR): White to pale yellowish-cream powder
Identification (IR): To conform to standard
Melting Point: 218°C to 221°C
Assay (Total Base): >98.5%
Sulfated Ash: <0.1%

**BENZIMIDAZOLE 98%**

Synonyms: 1,3-Benzodiazole
CAS No.: 51-17-2
Formula: C\(_7\)H\(_6\)N\(_2\)

Appearance: Off-white to tan crystalline powder and/or chunks
Identification (I.R.): To conform to structure and standard
Assay (on dry weight basis): 98.0% Minimum
Melting Point: 169-174 Deg. C
Water Content: 1.00% maximum
Boiling Point: >360 Deg. C
Solubility: Freely soluble in alcohol, sparingly soluble in ether.
Practically insoluble in benzene.

**BENZOPURPURIN 4B**

Synonyms: C.I. 23500; Direct Red 2
CAS No.: 992-59-6
Formula: C\(_{34}\)H\(_{26}\)N\(_6\)Na\(_2\)O\(_6\)S\(_2\)

Appearance: Dark Red Powder
Lambda Max: 500 nm in water
Visual Transition Interval: From pH 1.3 (violet) To pH 4.2 (red)
Solubility (1mg/ml H\(_2\)O): Clear dark red solution

**BIEBRICH SCARLET C.I. 26905**

Synonyms: C.I. 26905
CAS No: 4196-99-0
Formula: C\(_{19}\)H\(_{18}\)N\(_4\)O\(_7\)*2HCl

Appearance: Deep-red to dark brown powder
Identification: Conforms to standard
Assay: 98% minimum
Solubility (0.1% dist. H\(_2\)O): Clear red solution

**BISMARK BROWN R C.I. 21010**

Synonyms: Basic Brown 4; C.I. 21010
CAS No.: 5421-66-9

Appearance: Brownish-black powder
Lambda max.: 468nm in 50% ethanol
Solubility: To pass test
Loss on drying at 60 °C: 1.0% w/w maximum
Melting Point: 222 °C (dec.)

**BISMARCK BROWN Y C.I. 21000**

Synonyms: 4,4'-\(m\)-Phenylenbisazo)bis-\(m\)- phenylenediamine dihydrochloride; Basic Brown 1; Bismarck Brown B; Vesuvine; C.I. 21000
CAS No.: 10114-58-6
Formula: C\(_{38}\)H\(_{38}\)N\(_4\)*2HCl

Appearance: Light brown to red-brown, maroon, burgundy or red powder
Identification: Conforms to structure
Dye content: > 45%
Lambda max.: 457 nm in 50% ethanol + 5 ml 1N hydrochloric acid
Solubility (10 mg/ml in H\(_2\)O): Clear to opaque, red-orange to dark red solution.

**BISMUTH CITRATE USP**

Synonyms: Citric Acid Bismuth Salt; Bimuth Potassium Citrate
CAS No.: 813-93-4
Formula: BiC\(_6\)H\(_5\)O\(_7\)
Appearance: White, fine, odorless and tasteless powder

Identification: Conforms to standard
Assay (Bi): 49.0% - 54.0%
Loss on drying at 105 Deg. C: 1% maximum
Arsenic (As): 0.0010% maximum
Copper(Cu): 0.0010% maximum
Silver (Ag): 0.0010% maximum
Lead (Pb): 0.0010% maximum
Nitrate (NO\(_4\)): To pass test
Soluble Bismuth: 0.004% maximum
F.W.: 398.08

**BISMUTH NITRATE ACS**

Synonyms: Nitric Acid Bismuth (III) Salt, Bismuth trinitratopentahydrate
CAS No: 10035-06-0
Formula: Bl(NO\(_3\))\(_3\) . 5H\(_2\)O

Appearance: Clear, colorless, free from foreign matter
Identification A, B, C: Conforms
Assay (Bi): 49.0% - 54.0%
Loss on drying at 105 Deg. C: 1% maximum
Arsenic (As): 0.0010% maximum
Copper(Cu): 0.0010% maximum
Silver (Ag): 0.0010% maximum
Lead (Pb): 0.0010% maximum
Nitrate (NO\(_4\)): To pass test
Soluble Bismuth: 0.004% maximum
F.W.: 419.31
Appearance: White powder or transparent crystals, hygroscopic
Identification: Positive
Assay: 98.0% minimum
Substances not precipitated by H2S: 0.10% maximum
Insoluble Matter: 0.005% maximum
Chloride (Cl): 0.001% maximum
Sulfate (SO4): 0.005% maximum
Arsenic (As): 0.001% maximum
Calcium (Ca): 0.005% maximum
Copper (Cu): 0.002% maximum
Iron (Fe): 0.001% maximum
Potassium (K): 0.010% maximum
Sodium (Na): 0.020% maximum
Silver (Ag): 0.001% maximum

BISMUTH SUBCARBONATE USP

Synonyms: Bismuth carbonate, basic; Bismuth oxycarbonate
CAS No.: 5892-10-4
Formula: (BiO)2CO3

Appearance: White, odorless and tasteless powder
Appearance in solution (HNO3): Clear, colorless, free of foreign matter
Identification: Positive
Assay: 97.6% - 100.7%
Loss on drying: 1.0% maximum
Chloride (Cl): 0.05% maximum
Alkalies & Alkaline Earths: 1.0% maximum
Nitrate (NO3): 0.4% maximum
Arsenic (As): 0.005% maximum
Copper (Cu): 0.005% maximum
Ammonium Salts: To pass test
Residual Solvents: DI Water

BISMUTH SUBGALLATE USP

Synonyms: Bismuth subgallate purified; Bismuth subgallate USP; Bismuth dihydroxy (3,4,5-trihydroxybenzoato-O); Basic bismuth gallate; Gallic acid bismuth basic salt
CAS No.: 2650-86-8
Formula: Bi2O3

Appearance: Yellow, heavy, odorless & tasteless powder.
Identification: Positive
Appearance in solution (HNO3): Clear, free of foreign matter
Identification (A, B): Positive
pH: 2.7-5.0
Loss on drying @ 105 deg. C.: 1.0% maximum
Assay (as Bi): 56.0 – 59.4%
Total Salicylates: 36.5-39.3%
Free Salicylic Acid: 0.2% maximum
Arsenic: 0.0010% maximum
Copper, Lead, Silver: 0.0010% maximum
Nitrates: 0.4% maximum
Soluble Bismuth: 0.004% maximum

DUDLEY CHEMICAL

Loss on drying @ 105 deg. C.: 7.0% maximum
Assay: 52.0-57.0%
Free Gallic Acid: 0.5% maximum
Arsenic (As): 7.5 ppm maximum
Copper, Lead, Silver: To pass tests
Nitrate (NO3): To pass test
Residual Solvents: DI Water
Alkalies & Alkaline Earths: 0.5% maximum

BISMUTH SUBNITRATE USP

Synonyms: Bismuth hydroxide nitrate oxide; Basic bismuth nitrate
CAS No.: 1304-85-4
Formula: Bi5O(OH)9(NO3)4

Appearance: White, odorless and tasteless powder
Appearance in solution (HNO3): Clear, colorless, free from foreign matter
Identification: To pass test
Loss on drying: 3.0% maximum
Assay (BiO3): 79.0% minimum
Alkalies & Alkaline Earths: 0.5% maximum
Carbonate: To pass test
Chloride (Cl): 0.035% maximum
Sulfate (SO4): To pass test
Copper, Silver, Lead: To pass test
Arsenic (As): 8 ppm maximum
Ammonium Salts: To pass test

BISMUTH SUBSALICYLATE USP

Synonyms: 2-Hydroxybenzoic acid bismuth (3+) salt basics; Bismuth salicylate, basic; Oxo(salicylato)bismuth; Salicylic acid basic bismuth salt
CAS No.: 14882-18-9
Formula: C7H5BiO4

Appearance: White, light, odorless & tasteless powder
Identification (A, B): Positive
pH: 2.7-5.0
Loss on drying @ 105 deg. C.: 1.0% maximum
Assay (as Bi): 56.0 – 59.4%
Total Salicylates: 36.5-39.3%
Free Salicylic Acid: 0.2% maximum
Arsenic: 0.0010% maximum
Copper, Lead, Silver: 0.0010% maximum
Nitrates: 0.4% maximum
Soluble Bismuth: 0.004% maximum
**BISMUTH TRIBROMOPHENATE**  
Product#06281

Synonyms: Bismuth tribromophenol; Tris(2,4,6-tribromophenoxy)bismuthine; Tribromophenol bismuth xeroform

CAS No.: 5175-83-7

Formula: \( C_6H_2Br_3-O-Bi(OH)-O-[BiO(OH)-O-]nBi(OH)-O-C_6H_2Br_3 \)

F.W.: 1351.66

Appearance: Bright yellow, amorphous powder with a faint characteristic odor.

Identification: Positive

Loss on drying @95 deg.C: Not specified

Assay (as Bi): 40.0 - 49.0%

Substances not precipitated By NH4OH: 0.5% maximum

Recovery: 96.0% minimum

Copper, Lead, Silver, Sulfate: To pass test

Nitrate: To pass test

Arsenic (As): 0.0002% maximum

**BRILLIANT BLACK BN**  
Product#08010

Synonyms: C.I. 28440; 1743 Black; Black PN; Blue Black BN; Brilliant Black; Brilliant Black A; Brilliant Black NAF; Food Black 1, Tetrasodium Salt; Xylene Black F

CAS No.: 2519-30-4

Formula: \( C_{26}H_{17}N_5Na_4O_{14}S_4 \)

F.W.: 867.69

Appearance: Black powder

Dye Content: 60% minimum

Water insoluble matter: 0.2% maximum

Unsulfonated Aromatic Amines: 0.01% maximum

Lead (Pb): 10.00 mg/kg maximum

Mercury (Hg): 1.00 mg/kg maximum

Heavy metals: 40.00 mg/kg maximum

Sum of volatile matter at 135°C & Chloride & Sulfate (as sodium salt) By mass: 20.00% maximum

**BRILLIANT BLUE G250**  
Product#08061

Synonyms: Acid Blue 90; Coomassie Brilliant blue G; C.I. 42655

CAS No.: 6104-58-1

Formula: \( C_{47}H_{48}N_3NaO_7S_2 \)

F.W.: 854.03

Appearance: Deep blue crystalline powder

Wavelength of Maximum Absorption: 610-615 nm

Lambda Max. (in 50:50 IMS:Water) Absorption Ratio(A 1 max-15nm/A 1 max+15nm): 0.95-1.25

Solubility: Slightly soluble in cold water, moderately soluble in 10% trichloroacetic acid and soluble in hot water and ethanol

**BRILLIANT BLUE R250**  
Product#08065

Synonyms: Acid Blue 83; Coomassie Brilliant Blue R250; C.I. 42660; Hydrogen [4-{4-(p-ethoxyanilino)-4’]

CAS No.: 6104-59-2

Formula: \( C_{45}H_{44}N_3NaO_7S_2 \)

F.W.: 825.99
Appearance Dark-Purplish-Brown Powder
Absorption Ratio(A lambda max-15nm/A lambda max+15nm): 1.0-1.20
Specific Absorption:(A 1% in 10mm cell) at lamda max.: >700
Wavelength of maximum absorbance. Lambda Max. (50:50):
IMS:Water): 584-596nm
Solubility: Soluble in hot water and slightly soluble in ethanol.

BRILLIANT CRESYL BLUE
Synonyms: Brilliant Blue C; C.I. 51010
CAS No: 81029-05-2
Formula: C_{17}H_{21}N_{4}O . 0.5
F. W.: 400.97
Appearance: Green to Dark Blue crystalline powder
Assay (TICl3 Titration): > 60%
Biological Stain Commission: To Pass Test
Visual Transition Interval: From pH 0.2 (green) To pH 1.0 (blue)

BRILLIANT YELLOW C.I. 24890
Synonyms: Direct Yellow 4; C.I. 24890
CAS No: 3051-11-4
Formula: C_{26}H_{18}N_{4}Na_{2}O_{8}S_{2}
F. W.: 624.55
Appearance: Brick red to rust colored powder
Dye content: ~85%
Visual Transition Interval: From pH 6.4 (yellow) To pH 8.0 (red-orange)
Solubility: Soluble in water (2.5 gm/100 ml); slightly soluble in acetone and cellosolve.

BRILLIANT GREEN CERTIFIED
Synonyms: Basic Green 1; C.I. 42040
CAS No: 633-03-4
Formula: C_{27}H_{34}N_{2}O_{4}S
F. W.: 482.65
Appearance: Green to green-yellow crystalline powder
Dye content (TICl3 titration): 95% minimum
Loss on drying: 5% maximum
Lambda max: 625 (428) nm in 50 % ethanol
Appearance: White to off-white crystalline powder
Assay: 98.60% minimum
2-Bromobiphenyl: 0.50% maximum
Moisture: 0.15% maximum
Melting Point: 91.0 Deg. C minimum

5-BROMO-2-CHLOROBENZOIC ACID  Product#08134
Synonyms: 2-Chloro-5-BromoBenzoic Acid
CAS No.: 21739-92-4
Formula: C\textsubscript{7}H\textsubscript{4}BrClO\textsubscript{2}
F.W.: 235.46
Appearance: White to beige powder
Melting Point: 154 - 160 Deg. C
Assay: 98.0% minimum
Moisture: 1.0% maximum

BROMOCHLOROPHENOL BLUE NA SALT  Product#08138
Synonyms: Bromochlorophenol Blue Water Soluble
CAS No.: 102185-52-4
Formula: C\textsubscript{19}H\textsubscript{9}Br\textsubscript{2}Cl\textsubscript{2}NaO\textsubscript{5}S
F.W.: 603.06
Appearance: Black powder
Lambda max.: 590nm in water
Visual transition interval: From pH 3.2 (yellow) to pH 4.8 (purple)

BROMOCRESOL GREEN FREE ACID ACS  Product#08142
Synonyms: 3',3",5',5"-Tetrabromo-m-cresolsulfonephthalein
CAS No: 76-60-8
Formula: C\textsubscript{21}H\textsubscript{14}Br\textsubscript{4}O\textsubscript{5}S
F.W.: 698.04
Appearance: Beige to yellow to yellow brown powder
Melting Point: 225 Deg. C (dec.)
Clarity of Solution: Passes Test
Visual Transition Interval: From pH 3.8 (yellow) To pH 5.4 (blue)

BROMOCRESOL PURPLE FREE ACID ACS  Product#08152
Synonyms: 5',5"-Dibromo-o-cresolsulfonephthalein
CAS No.: 115-40-2
Formula: C\textsubscript{21}H\textsubscript{16}Br\textsubscript{2}O\textsubscript{5}
F.W.: 562.22
Appearance: Grey to light purple or pink to yellow-tan powder
Melting Point: 241 - 242 Deg. C
Clarity of solution: Passes Test
Aqueous solubility: Practically insoluble
Visual Transition Interval: From pH 5.2 (Yellow) To pH 6.8 (Purple)

BROMOCRESOL GREEN SODIUM SALT ACS  Product#08146
Synonyms: 4,4'-{(3H-1,2-Benzoxathiol-3-Ylidene)Bis(2,6-dibromo-3-methylphenol  S,S-Dioxide Monosodium salt
CAS No: 62625-32-5
Formula: C\textsubscript{31}H\textsubscript{13}Br\textsubscript{4}NaO\textsubscript{5}S
F.W.: 720.02
Appearance: Dark-brown to dark red, or Greenish-black crystalline powder
Clarity of solution: To pass test
Visual Transition Interval: From pH 3.8 (yellow) To pH 5.4 (blue)
Melting Point: 230 deg. C
Loss on drying: < 5%
Solubility: H2O 40mg/ml, EGME 50mg/ml, ETOH 60mg/ml

BROMOCRESOL GREEN SODIUM SALT ACS  Product#08156
Synonyms: 5',5"-Dibromo-o-cresolsulfonephthalein Sodium salt
CAS No: 62625-30-3
Formula: C\textsubscript{31}H\textsubscript{15}Br\textsubscript{2}O\textsubscript{5}SNa
F.W.: 562.22
Appearance: Purple-brown to orange crystalline powder
Melting Point: 241 - 242 Deg. C
Clarity of solution: Passes Test
Aqueous solubility: Practically insoluble
Visual Transition Interval: From pH 5.2 (Yellow) To pH 6.8 (Purple)
Loss on drying at 110 Deg.C (1hr): 5.0% maximum
Absorptivity 1%, 1cm: (pH 5.2) at Lambda max. 430 nm: 380-430
(pH 6.8) at Lambda max. 589 nm: 940-1050

BROMOCRESOL PURPLE SODIUM SALT ACS  Product#0816
Synonyms: 5',5"-Dibromo-o-cresolsulfonephthalein Sodium salt
CAS No: 62625-30-3
Formula: C\textsubscript{31}H\textsubscript{16}Br\textsubscript{2}O\textsubscript{5}SNa
F.W.: 562.22
Appearance: Purple-brown to orange crystalline powder
Melting Point: 241 - 242 Deg. C
Clarity of solution: Passes Test
Aqueous solubility: Practically insoluble
Visual Transition Interval: From pH 5.2 (Yellow) To pH 6.8 (Purple)
Loss on drying at 110 Deg.C (1hr): 5.0% maximum
Absorptivity 1%, 1cm: (pH 5.2) at Lambda max. 430 nm: 380-430
(pH 6.8) at Lambda max. 589 nm: 940-1050

5-BROMOINDOLE 99%  Product#08158
Synonyms: 5-bromo-2H-Indole
CAS No: 10075-50-0
Formula: C\textsubscript{8}H\textsubscript{6}BrN
F.W.: 235.46
Appearance: White to off-white crystalline powder
Assay: 98.60% minimum
2-Bromobiphenyl: 0.50% maximum
Moisture: 0.15% maximum
Melting Point: 91.0 Deg. C minimum

DUDLEY CHEMICAL
Phone: 1-732-886-3100  Fax: 1-732-886-3688  Email: dudley@dudley-chem.com
**BROMOPHENOL BLUE FREE ACID ACS**  
**Product#08162**

**Synonyms:** Tetrapropenolotetrapropenosulfonphthalein, BPB  
**CAS No:** 115-39-9  
**Formula:** C₁₉H₁₀O₅Br₄  
**F.W.:** 669.97

**Appearance:** White to Off-White to Tan powder  
**Assay:** 99% minimum  
**Melting Point:** 90-92°C  
**Infrared Structure:** Conforms to Structure  
**Carbon:** 48.3 - 49.7%  
**Nitrogen:** 6.9 – 7.5%  
**Purity (GC):** ≥ 98.5%

**Clarity of Solution:** Passes Test  
**Visual Transition Interval:** pH 3.0 (yellow) to pH 4.6 (blue)

---

**BROMOPHENOL BLUE SODIUM SALT ACS**  
**Product#08166**

**Synonyms:** 3',3",5',5"-Tetrabromophenolsulfon-phthalein sodium salt  
**CAS No:** 34725-61-6  
**Formula:** C₁₉H₉Br₄NaO₅S  
**F.W.:** 691.97

**Appearance:** Yellow brown powder  
**Loss on drying at 110 Deg. C (1 hour):** < 5.0%  
**Clarity of solution:** To pass test  
**Visual transition interval:** From pH 3.0 (yellow) to pH 4.6 (blue)  
**Absorptivity 1%/1cm:**  
  - (pH 3.0) at Lambda max 436 nm: 320-370  
  - (pH 4.6) at Lambda max 591 nm: 880-950

---

**BROMOPHYROGALLOL RED**  
**Product#08168**

**Synonyms:** 3',3"-Dibromosulfonylgalliein  
**CAS No:** 16574-43-9  
**Formula:** C₁₉H₁₂Br₂O₅S  
**F.W.:** 574.15

**Appearance:** Green to Brown to Black Powder  
**Loss on drying:** 5.0% max.
**SPECIFIC EXTINCTION**: E(1%/1cm)=min. 585 (at 574-577 nm in buffer).

**SOLUBILITY**: 0.1% in 20% ethanol clear

**VISUAL TRANSITION INTERVAL**: pH 4.7 (yellow) - 6.3 (purple)

---

**BROMOPHENOL RED SODIUM SALT**

| Synonyms: 5',5''-Dibromophenolsulfonphtalein |
| CAS No: 102185-50-2 |
| Formula: C_{19}H_{11}Br_{2}O_{5}S_{Na} |
| F.W.: 534.15 |

**Visual Transition Interval**: pH 5.2 (yellow) to pH 6.8 (red)

---

**4-BROMOISOQUINOLINE, 98%**

| Synonyms: 4-Isquinolinyl Bromide |
| CAS No: 1532-97-4 |
| Formula: C_{9}H_{6}BrN |
| F.W.: 208.06 |

**Appearance**: White to light yellow crystalline powder

**Assay (GC)**: ≥ 98%

**Melting Point**: 39-43 Deg. C

**Boiling Point**: 280-285 Deg. C

**Flash Point**: >230 Deg. F

---

**6-BROMO-2-NAPHTHOL, 98%**

| Synonyms: 2-Hydroxy-6-bromonaphthalene |
| CAS No.: 15231-91-1 |
| Formula: BrC_{10}H_{6}OH |
| F.W.: 223.07 |

**Appearance**: Off-White to Beige to Pink Powder or Chunks

**Titrination**: 96.5% - 103.5% (w/ AgNO3 after oxygen combustion)

**Melting Point**: 122˚ C - 124˚ C

**Assay**: ≥ 96.5%

---

**3-BROMO-2,4,6-TRIMETHYLANILINE, 98%**

| Synonyms: 3-Bromo-2,4,6-Trimethylaniline |
| CAS No: 82842-52-2 |
| Formula: C_{9}H_{12}BrN |
| F.W.: 214.10 |

**Appearance**: Orange to dark purple or brown crystalline powder or crystals

**Identification**: To Pass Test

**Assay (GC)**: > 98%

**Melting Point**: 35 - 40 Deg. C

**Flash Point**: > 110 Deg. C (230 Deg. F)

**Density**: 1.313 g/ml at 25 Deg. C

---

**2-BROMO-4'-NITROACETOPHENONE**

| Synonyms: 2-Bromo-4'-Nitroacetophenone 95% |
| CAS No: 99-81-0 |
| Formula: O_{2}NC_{6}H_{4}COCH_{2}Br |
| F.W.: 244.04 |

**Appearance**: Yellow to Gold Powder, Crystals powder and/or chunks

**Infrared Spectrum**: Conforms to Structure

**Titrination**: 94.0-106% (w/ AGNO3 after reflux or Oxygen Combustion)

**High Pressure Liquid**: 94% Minimum

---

**5-BROMOVANILLIN**

| Synonyms: 3-Bromo-4-Hydroxy-5-Methoxybenzaldehyde |
| CAS No.: 2973-76-4 |
| Formula: C_{8}H_{7}BrO_{3}, BrC_{6}H_{2}(OH)(OCH_{3})CHO |
| F.W.: 231.05 |

**Appearance**: Light brown to beige powder

**Assay (GC)**: 98% minimum

**Melting Point**: 164 - 166 Deg. C

---

**1-BROMOPYRENE**

| Synonyms: 1-Pyrenyl bromide |
| CAS No: 1714-29-0 |
| Formula: C_{16}H_{9}Br |
| F.W.: 281.15 |

**Appearance**: Off-white to light yellow to tan crystalline powder

**Identification**: Conforms to structure

**Melting Range**: 94 Deg. C - 105 Deg. C

**Assay (Titration)**: 95.5-104.5% (w/ AgNO3 after Oxygen combustion)

**Assay (GC)**: 96.0% minimum

---

**DUDLEY CHEMICAL**
**BROMOXYLENOL BLUE**

**Product#08490**

Synonyms: 3,3’-Dibromo-p-xyleneolsulfonphthaleine  
CAS No.: 40070-59-5  
Formula: C_{23}H_{20}Br_{2}O_{5}S

![Molecule](image1.png)  
F.W.: 568.27

Appearance: Off White to Violet, Purple Powder or Crystals  
Identification: Conforms to Structure  
Solubility0.1% (E+OH): Clear yellow to Orange to Red solution  
Visual Transition Interval: pH 6.0 Yellow to pH 7.6 Blue  
Loss on drying: < 3%

**5-BROMO-2-NITROPYRIDINE**

**Product#08800**

Synonyms: 3-Bromo-6-Nitropyridine  
CAS No.: 39856-50-3  
Formula: C_{5}H_{3}BrN_{2}O_{2}

![Molecule](image2.png)  
F.W.: 202.99

Appearance: Off-white - yellow to light brown crystalline powder  
Assay(HPLC): 98.0% minimum  
Loss on drying: 1% maximum  
Melting Point: 145-150 deg. C

---

**CALCANEUM POWDER USP**

**Product#09100**

Synonyms: Zinc oxide; Chinese white; Flowers of zinc  
CAS No.: 1314-13-2  
Formula: ZnO with Fe2O3

![Zinc Oxide](image3.png)  
F.W.: 81.38

Appearance: Pink, odorless powder  
Identification A & B: To pass tests  
Assay: 98.0% to 100.5%  
Microbial Limits: To pass test  
Loss on ignition: 1% maximum  
Alkaline substances: To pass test  
Arsenic (As): 8 ppm maximum  
Calcium (Ca): To pass test  
Lead (Pb): To pass test

---

**CALCIUM ACETATE MONOHYDRATE ACS**

**Product#09116**

Synonyms: Calcium Diacetate; Acetic Acid calcium salt; Calcium acetate hydrate  
CAS No.: 5743-26-0  
Formula: C_{4}H_{6}CaO_{4}·H_{2}O

![Calcium Acetate](image4.png)  
F.W.: 176.18

Appearance: Colorless to white crystals  
Assay: >99.0%  
Insoluble Matter: 0.005% maximum  
Alkalinity: To pass test  
Titrable acid: 0.035 meq/g maximum  
Chloride (Cl): 0.001% maximum  
Sulfate (SO4): 0.01% maximum  
Barium (Ba): 0.01% maximum  
Heavy metals (as Pb): 0.005% maximum  
Iron (Fe): 0.001% maximum  
Magnesium (Mg): 0.05% maximum  
Sodium (Na): 0.02% maximum  
Strontium (Sr): 0.05% maximum

---

**CALCANEUM CARBONATE ACS**

**Product#09130**

Synonyms: Carbonic Acid calcium salt; Calcite; Aragonite; Limestone  
CAS No.: 471-34-1  
Formula: CaCO_{3}

![Calcium Carbonate](image5.png)  
F.W.: 100.09

Appearance: Fine white crystalline powder  
Test:  
Acid-insoluble substances: 2.0% maximum  
Alkaline substances: 2.0% maximum  
Lead (Pb): To pass test  
Arsenic (As): 8 ppm maximum  
Calcium (Ca): < 3%  
Lime (Ca): 0% maximum  
Sodium (Na): 0.02% maximum  
Strontium (Sr): 0.05% maximum  
Barium (Ba): 0.01% maximum  
Heavy metals (as Pb): 0.005% maximum  
Iron (Fe): 0.001% maximum  
Chloride (Cl): 0.001% maximum  
Sulfate (SO4): 0.01% maximum  
Zinc (Zn): 0.02% maximum  
Selenium (Se): 0.005% maximum  
Antimony (Sb): 0.01% maximum  
Mercury (Hg): 0.005% maximum  
Boron (B): 0.01% maximum  
Chromium (Cr): 0.01% maximum  
Copper (Cu): 0.01% maximum  
Molybdenum (Mo): 0.001% maximum  
Cadmium (Cd): 0.005% maximum  
Lead (Pb): 0.005% maximum  
Selenium (Se): 0.005% maximum  
Antimony (Sb): 0.05% maximum  
Mercury (Hg): 0.005% maximum  
Residual chlorine: 0% maximum  
Organics: < 1%  
Loss on drying: < 2%  
Soluble matter: > 99.5%
Appearance: White powder
Assay (dried basis): \( > 99\% \text{ CaCO}_3 \)

Insoluble in dilute hydrochloric acid: 0.01\% maximum
Chloride (Cl): 0.001\% maximum
Fluoride (F): 0.0015\% maximum
Sulfate (SO4): 0.01\% maximum
Ammonium (NH4): 0.003\% maximum
Heavy metals (as Pb): 0.001\% maximum
Iron (Fe): 0.003\% maximum
Barium (Ba): 0.01\% maximum
Magnesium (Mg): 0.02\% maximum
Potassium (K): 0.01\% maximum
Sodium (Na): 0.1\% maximum
Strontium (Sr): 0.1\% maximum

**CALCIUM CARBONATE LIGHT USP**  Product#09131

Synonyms: Carbonic acid calcium salt; Calcite; Aragonite; Limestone
CAS No: 471-34-1
Formula: CaCO\(_3\)

F.W.: 100.09

Assay: 98.0 - 100.5\% 
Loss on drying @ 200 deg. C: 2.0 \% maximum
Acid insoluble Substances: 0.2 \% maximum
Fluoride (F): 0.005\% maximum
Arsenic (As): 3 ppm maximum
Barium (Ba): To pass test
Lead (Pb): 3 ppm maximum
Iron (Fe): 0.1 \% maximum
Mercury (Hg): 0.5 ppm maximum
Magnesium and Alkali Salts: 1.0 \% maximum
Heavy metals (as Pb): 0.002 \% maximum
Organic Volatile Impurities: To pass Test

**CALCIUM LEVULINATE DIHYDRATE**  Product#09198

Synonyms: \( \gamma \)-Ketovaleric acid calcium salt; 4-Oxopentanoic acid calcium salt; Levulinic acid calcium salt dihydrate
CAS No: 5743-49-7
Formula: CH\(_3\)COCH\(_2\)CH\(_2\)COO\(^-\)\(_{1/2}\)Ca\(\cdot\)H\(_2\)O

F.W.: 154.17

Assay: 98% Minimum

**CALCIUM NITRATE TETRAHYDRATE ACS**  Product#09209

Synonyms: Nitric acid, Calcium (II) salt, Calcium II nitrate, tetrahydrate (1:2:4), Calcium nitrate; 4-Hydrate, calcium dinitrate
CAS No: 13477-34-3
Formula: Ca(NO\(_3\))\(_2\)\(_{1/2}\)H\(_2\)O

F.W.: 172.17

Assay: 98.0 - 102.0\% 
Insoluble in dilute hydrochloric acid: 0.02\% maximum
Chloride (Cl): 0.005\% maximum
Nitrate (NO3): Passes test
Carbonate (CO3): Passes test
Heavy metals (as Pb) 0.002% maximum  
Iron (Fe) 0.001% maximum  
Magnesium (Mg) 0.02% maximum  
Potassium (K) 0.005% maximum  
Sodium (Na) 0.02% maximum  
Strontium (Sr) 0.05% maximum

**CALCIUM SULFATE HEMI-HYDRATE ACS**  
Product#09238

Synonyms: Calcium Sulfate Hemihydrate 98%
CAS: 10034-76-1
Formula: CaSO$_4$ . $\frac{1}{2}$H$_2$O

Appearance: White or Off-white powder
Assay (Titration): 97.5 - 102.5%
Identification: Passes Test
X-Ray Diffraction: Conforms to Standard
Solubility: Very Slightly soluble in cold water. Slightly soluble in hot water. Soluble in acids, ammonium salts, and glycerin.

**CALCONCARBOXYLIC ACID**  
Product#09268

Synonyms: Patton and Reeder’s Indicator
CAS No: 3737-95-9
Formula: C$_{21}$H$_{14}$N$_2$O$_7$S

Appearance: Very Dark Violet Powder
Lambda Max: 570 nm in Methanol

**CALMAGITE**  
Product#09330

Synonyms: 3-Hydroxy-4-(2-hydroxy-5-methylphenylazo)-1-naphthalensulfonic acid
CAS No: 3147-14-6
Formula: C$_{17}$H$_{18}$CIN$_3$O$_4$

Appearance: Black powder with chunks
Solubility 0.1% (water): Clear red solution
Loss on drying at 110 Deg. C:  <10%
Absorptivity 1%/1cm,(Ammonia Buffer, pH 10.0+2ml of 0.05M EDTA solution) at Lambda max.: 604.0 nm: >300
Visual transition Interval: From pH 7.1 (red) To pH 9.1 (blue)
Suitability as Magnesium Indicator: To pass test
Lambda max: 602 nm in 0.01 N Sodium Hydrate
Melting Point: 300 deg. C

**CARMINE CERTIFIED / CARMINIC ACID 50%**  
Product#09453

Synonyms: Alum lake of carminic acid; Cochineal; Natural Red 4; C.I. 75470
CAS No: 1390-65-4
Formula: C$_{32}$H$_{52}$O$_{13}$

Appearance: Dark pink to red powder
Dye Content (Carminic Acid): 50.0 – 55.0 %
Lambda Max.: 531 (563) nm in 0.1 N Sodium Hydroxide
Loss on drying: 20.0% maximum
Ash: 12.0% maximum
Arsenic (As): < 1 ppm
Lead (as Pb): < 10 ppm
Solubility: Soluble in ethanol, alkali hydroxides, borax (0.8 mg/ml); partly soluble in water (8 mg/ml) or dilute acids.

**CARMINIC ACID 95%**  
Product#09464

Synonyms: C.I. 75470, Natural Red 4; 7-a-D-Glucopyranosyl-9,10-dihydro-3,5,6,8-tetrahydroxy-1-methyl, 9,10-dioxo-2-anthracene-carboxylic acid
CAS No: 1260-17-9
Formula: C$_{32}$H$_{52}$O$_{13}$

Appearance: Red to Purple Powder
Assay: 95 % Minimum
Lambda Max: 495 nm

**CELESTINE BLUE B**  
Product#09500

Synonyms: C.I. 51050; Mordant Blue 14
CAS No: 1562-90-9
Formula: C$_{17}$H$_{18}$ClN$_3$O$_4$

Appearance: Black to dark-grey to very dark brown powder
Identification: Conforms to structure
Solubility (0.1% H2O): Dark blue to dark purple solution
UV-Visible Spectrum Conc. 10.0 mg/l in H2O: E(645 +/- 7 nm) = 29,000 minimum

**CETYL TRIMETHYL AMMONIUM BROMIDE ACS**  
Product#09550

Synonyms: Cetrimonium bromide; CTAB;
Palmityltrimethylammonium bromide;
Hexadecyltrimethylammonium bromide

CAS No: 57-09-0
Formula: C_{19}H_{42}NBr
F.W.: 364.45

Appearance: Colorless to White to Faint Yellow powder
Identification (IR): Conforms to structure
Solubility (0.1% H2O): Clear to Colorless solution
Assay (Titration): 99.0% Minimum
Residue on Ignition: ≤0.1%
Moisture (by KF): < 0.5%

CHICAGO SKY BLUE 6B

Synonyms: C.I. Direct Blue 1; C.I. 24410; Atlantic resin fast blue
CAS No.: 2610-05-1
Formula: C_{34}H_{28}N_{6}O_{16}S_{4}
F.W.: 992.82

Appearance: Dark blue to brown powder
Dye content: ~50%
Lambda max.: 618 nm in water
I.R. Spectrum: Conforms to structure and standard
Solubility (1% in water): Opaque, dark blue solution

CHINA BLUE (ACID BLUE 22) C.I.42755

Synonyms: Acid Blue 22 C.I. 42755
Formula: C_{32}H_{25}N_{3}Na_{2}O_{9}S_{3}
F.W.: 737.73

Appearance: Brownish – Purple Powder
Identification: Conforms to structure and standard
Lambda Max: 600 nm in water
Moisture content: <10%

CHLORAZOL BLACK E CERTIFIED

Synonyms: Direct Black 38; C.I. 30235
C.A.S.: 1937-37-7
Formula: C_{34}H_{25}N_{9}Na_{2}O_{7}S_{2}
F.W.: 781.73

Appearance: Brown to Black powder
Lambda Max (in Ethanol): 598-602 nm
Moisture: <8%
Insolubility in water: <0.8%

1-CHLOROADAMANTANE, 98%
Product#09660

Synonyms: 1-Adamantyl chloride
CAS No.: 935-56-8
Formula: C_{16}H_{33}Cl
F.W.: 170.68

Appearance: White to light grey crystalline powder/chunks
Assay (Titration): 98.0% minimum
Melting Point: 161 - 166 Deg. C

5-CHLOROINDOLE, 98%
Product#09682

Synonyms: 1H-Indole,-5-chloro-(9CI)
CAS No.: 17422-32-1
Formula: C_{9}H_{6}ClIN
F.W.: 151.60

Assay: 98.0% minimum
Melting Point: 69 to 71 Deg. C

2-CHLORO-5-NITROBENZALDEHYDE

Synonyms: 3-Nitro-6-Chlorobenzaldehyde
CAS No.: 6361-21-3
Formula: C_{7}H_{4}CINO_{3}
F.W.: 185.57

Appearance: Off-white to pale yellow powder
Assay: 97% minimum
Melting Point: 76 °C to 82 °C
Moisture: 0.5% maximum

4-CHLORO-3-NITROPHENOL 98%
Product#09724

Synonyms: Phenol, 4-chloro-3-nitro
CAS No.: 610-78-6
Formula: C_{6}H_{5}(NO_{2})OH
F.W.: 181.73
CHLOROPHENOL RED

Product#09801

Synonyms: Dichlorophenolsulfonephthalein
CAS No.: 4430-20-0
Formula: C₁₉H₁₂Cl₂O₅S

F.W.: 423.27

Appearance: Red to Green or Red-Brown crystalline powder
Visual Transition Interval: 4.8-5.2 pH Yellow, 6.4-6.8 pH Violet
IR: To pass test
Specific Extinction E (1% / 1cm) @ 575nm in 0.1 N NAOH: >1000
Solubility in alcohol(0.1% in ETOH): Clear

CHLOROPHENOL RED SODIUM SALT

Product#09803

Synonyms: Dichlorophenolsulfonephthalein
CAS No.: 4430-20-0
Formula: C₁₉H₁₂Cl₂O₅S

F.W.: 423.27

Appearance: Dark red to Brown crystals
Infrared Spectrum: Conforms to Structure
UV-Visible Spectrum: C=0.01 g/l, H₂O : E(575+/−3)nm = 22,000(min)
Visual Transition: pH 3.0 Yellow
Interval: pH 6.4 Violet
Titration: 70-130% (with Silver nitrate after oxygen combustion)

4-CHLOROTHYMOL

Product#09890

Synonyms: 4-Chloro-2-isopropyl-5-methylphenol
CAS No.: 89-68-9
Formula: C₁₀H₁₃ClO

F.W.: 184.66

Appearance: White to Off-White crystalline Powder

DUDLEY CHEMICAL

Identification (IR): Conforms to Structure
Melting Point: ≥ 57.5˚C
Assay(GC): 99.5% minimum
Assay (Titration): (AgNO₃ after Oxygen Combustion): 99.5-101.5%
Solubility: 10% in Ethanol, clear to very slightly hazy yellow solution
Thymol: ≤ 0.01%
2-Chlorothymol: ≤ 0.01%
Bromothymol: ≤ 0.01%

CHOCOLATE BROWN HT

Product#09981

Synonyms: C.I. 20285; Food Brown #3; Brown HT
CAS No.: 4553-89-3
Formula: C₂₇H₁₈N₄Na₂S₂O₉

F.W.: 652.6

Dye content: ~70%
Arsenic: 3 ppm maximum
Lead: 10 ppm maximum
Mercury: 1 ppm maximum
Cadmium: 1 ppm maximum
Heavy metals: 40 ppm maximum
Water-insoluble matter: 0.2% maximum
Ether-extractable matter: 0.2% maximum

CHROME AZUROL S C.I.43825

Product#10100

Synonyms: Mordant Blue 29, C.I. No.: 43825
CAS No: 1667-99-8
Formula: C₂₃H₁₃Cl₂Na₃O₉S₂

F.W.: 605.29

Appearance: Brown to black crystalline powder
Dye content: ~65%
Solubility: H₂O 100 mg/ml, EGME 100 mg/ml, EtOH 4 mg/ml
Solubility (1 mg/ml, H₂O): Clear dark red solution

CHROMOTROPE 2B C.I. 16575

Product#10396

Synonyms: Acid red 176; Chromotrope red 4B
CAS No: 548-80-1
Formula: C₁₆H₉N₃O₁₀S₅Na₂

F.W.: 513.37

Appearance: Greenish brown Powder
Melting Point: 300 deg. C
Lambda max: 514 nm in water

**CHROMOTROPE 2R C.I. 16570**  
Product#10401

Synonyms: Acid Red 29, C.I. 16570  Mordant Blue 80  
CAS No: 4197-07-3  
Formula: C_{16}H_{10}N_{2}Na_{2}O_{8}S_{2}  
Appearance: Brownish-red powder  
Lambda Max: ~510 nm in Methanol  
Loss on drying: < 10%  
Solubility: 0.1% in water: Clear red solution  
F.W.: 468.37

**CHROMOTROPE FB**  
Product#10405

Synonyms: Disodium 2-(4-sulfo-1-naphthylazo)-1-naphthol-4-sulfonate.  
CAS No: 3567-69-9  
Formula: C_{20}H_{12}N_{2}Na_{2}O_{7}S_{2}  
Appearance: Dark Red to Brown to Black powder  
Infrared Spectrum: Conforms to Structure  
UV-Visible Spectrum: 0.03 G/L, H2O  
E(516 +/- 3NM) = >14,500  
E(323 +/- 3NM) = >9,000  
E(217 +/- 3NM) = >33,000  
F.W.: 502.43

**CHROMOTROPIC ACID DISODIUM SALT ACS**  
Product#10600

Synonyms: 4,5-Dihydroxynaphthalene-2,7-disulfonic acid disodium salt  
CAS Number: 5808-22-0  
Formula: (HO)_{2}C_{10}H_{4}(SO_{3}Na)_{2}*H_{2}O  
Appearance: White to grey, beige or brown powder  
Infrared Spectrum: Conforms to structure and standard  
Melting Point: >300 Deg. C  
Loss on drying: 9.0 – 10.0%  
Assay on dried basis (by Nitrite value): 97.0% minimum  
Aqueous solubility: Very soluble  
Clarity of Solution: To pass test  
Sensitivity to Formaldehyde: To pass test  
Sensitivity to Nitrate: To pass test  
NOTE: Material darkens in storage with no loss in purity  
F.W.: 400.29

**CHROMOTROPIC ACID DISODIUM SALT TECHNICAL**  
Product#10602

Synonyms: 4,5-Dihydroxynaphthalene-2,7-disulfonic acid disodium salt  
CAS Number: 5808-22-0  
Formula: (HO)_{2}C_{10}H_{4}(SO_{3}Na)_{2}*H_{2}O  
Appearance: White to grey, beige or brown powder  
Infrared Spectrum: Conforms to structure and standard  
Melting Point: >300 Deg. C  
Loss on drying: 9.0 – 10.0%  
Assay on dried basis (by Nitrite value): 97.0% minimum  
Aqueous solubility: Very soluble  
Clarity of Solution: To pass test  
Sensitivity to Formaldehyde: To pass test  
Sensitivity to Nitrate: To pass test  
NOTE: Material darkens in storage with no loss in purity  
F.W.: 400.29

**CHRYSOPHENINE C.I. 24895**  
Product#10882

Synonyms: Benzenesulfonic Acid, 2,2’-(1,2-Ethenediyl)bis 5-(4-Ethoxyphene); c.I. 24895; Direct Yellow 12  
CAS No.: 2870-32-8  
Formula: C_{30}H_{28}N_{4}O_{8}S_{2}  
Appearance: Orange to Orange Yellow Powder  
Identification: To pass test  
Solubility 0.1% (in Distilled water): Clear solution  
Loss on drying: < 15%  
Dye Content: ~ 65.0 %  
Lambda max.: 389 nm in water  
F.W.: 680.67

**CLIOQUINOL EP/USP**  
Product#10910

Synonyms: 5-Chloro-7-iodo-8-quinolino; Alchloquin; Alioform; Bactol  
CAS No: 130-26-7  
Formula: C_{9}H_{5}CLINO  
Appearance: White to off-white, light yellow to yellow with a tan cast powder, free from foreign matter  
Identification (I.R.): To conform to standard and structure  
Assay (Dry Basis): 98% - 101%  
Acidity or alkalinity: < 0.5ml NaOH 0.01M  
Loss on drying: 0.5% maximum  
Residue on Ignition: 0.1% maximum  
F.W.: 305.50
**Free Iodine and Iodide:** To pass test

**Solubility:** Clear yellow to yellow-green solution at 50 mg/ml in Dioxane.

**COLLOIDAL SILVER**  
Product#10950

**Synonyms:** Silver, HQ; Silver ICP Standard  
**CAS No.:** 9015-51-4  
**Formula:** Ag  
**F.W.:** 107.87

**Appearance:** Grey to black-blue brilliant flakes or granulated powder. Almost odorless.

**Identification:** To pass test

**Solubility:** Insoluble in alcohol and ether. Slowly soluble in water.

**Total Alkalinity:** ≥ 2.8 %

**Silver Content:** 70 – 75 %

**CONGO RED ACS**  
Product#11100

**Synonyms:** Direct Red 28; C.I. 22120  
**CAS No: 573-58-0**  
**Formula:** C32H22N6O6S2Na2  
**F.W.:** 696.67

**Appearance:** Dark red to reddish-brown powder

**Clarity of Solution:** Passes Test

**Aqueous solubility:** Soluble

**Visual Transition Interval:** From pH 3.0 (blue) To pH 5.2 (red)

**Loss on drying:** 3.0 % maximum

**CONGO RED CERTIFIED**  
Product#11104

**Synonyms:** Congo Red; Congo Red Indicator Grade; C.I. 22120; Direct Red 28

**CAS No: 573-58-0**

**Formula:** C32H22N6O6S2Na2  
**F.W.:** 696.67

**Appearance:** Dark, Red-Brown Powder

**Lambda Max:** 497 nm in water & 1 ml Na2CO3

**Visual Transition Interval:** pH 3.0 (blue) to pH 5.0 (red)

**Dye Content:** 75 % minimum

**CREATININE**  
Product#11662

**Synonyms:** 2-Imino-N-methylhydantoin  
**CAS No:** 60-27-5  
**Formula:** C4H7N3O

**O-CRESOLPHTHALEIN**  
Product#11200

**Synonyms:** 3,3-Dimethylphthalein  
**CAS No:** 596-27-0  
**Formula:** C22H18O4

**F.W.:** 346.38

**Appearance:** White to off-white crystalline powder

**Lambda Max:** 566 (381) nm in 0.1 ml Sodium Hydroxide

**Melting Point:** 223 - 225 deg. C

**Loss on Drying @ 105 °C:** 4.0 % maximum

**Visual Transition Interval:** From pH 8.2 (colorless), To pH 9.8 (Violet Red)

**Solubility in Ethanol:** Clear colorless solution

**O-CRESOLPHTHALEIN COMPLEXONE ACS**  
Product#12102

**Synonyms:** Phthalein Purple; Metalphthalein; Xylenylphthalein-bisiminodiacetic acid

**CAS No.:** 2411-89-4  
**Formula:** C32H32N2O12

**F.W.:** 636.60

**Appearance:** White to light pink to tan crystalline powder

**Identification:** Conforms to structure and standard

**Residue on ignition:** 0.5% maximum

**Loss on drying:** 10.0% maximum

**Lamda Max:** 575(377)nm in 0.1 N sodium hydroxide

**Clarity of solution:** To pass test

**Suitability as a mixed indicator for complexometry:** To pass test
**O-CRESOLPHTHALEIN COMPLEXONE SODIUM SALT**  
Product#12103  
**Synonyms:** Glycine, N,N’-(3-Oxo-1(3H)-Isobenzafuranylidene) Bis(6-Hydroxy-)  
**CAS No.:** 94442-10-1  
**Formula:** C$_{32}$H$_{30}$N$_2$O$_{12}$Na$_2$  
**F.W.:** 680.57  
**Appearance:** Dark Green to Olive Green Powder  
**Solubility (1% in H$_2$O):** Clear, Very slightly soluble in water and ethanol, and soluble in methanol and acetic acid.

**Loss on drying:** 1.5% maximum  
**Lambda Max:** 579(371)nm in 0.005N Sodium Hydroxide in Methanol  
**Visual Transition Interval:** pH 2.0 (Orange) to pH 3.0 (Yellow)  
**pH 7.2 (Yellow) to pH 8.8 (Red)**  
**Solubility (0.1% in 50% Methanol):** Clear, deep purple solution  
**Dye content:** ~95%  
**Melting Point:** 140 - 145 Deg. C  
**Solubility:** 2% in water, 1% in ethanol  

---

**META-CRESOL PURPLE**  
Product#12110  
**Synonyms:** m-Cresolsulfonephthalein  
**CAS No.:** 2303-01-7  
**Formula:** C$_{21}$H$_{18}$O$_5$S

**F.W.:** 382.43  
**Appearance:** Dark Green to Olive Green Powder  
**Identification (IR):** Conforms to standard  
**Visual Transition Intervals:** pH 1.2 (Red) to pH 2.8 (Yellow)  
**pH 7.4 (Yellow) to pH 9.0 (Purple)**

**Loss on drying:** 1.5% maximum  
**Lambda Max:** 579(371)nm in 0.005N Sodium Hydroxide in Methanol  
**Visual Transition Interval:** pH 0.2 (Orange) - 1.8 (Yellow)  
**pH 7.2 (Yellow) - 8.8 (Reddish-purple)**

**Solubility (1 mg/ml, H$_2$O):** Clear, dark red solution  
**Dye content:** > 65.0%  
**Melting Point:** 140 - 145 Deg. C  
**Solubility:** 2% in water, 1% in ethanol  

---

**META-CRESOL PURPLE W/S**  
Product#12130  
**Synonyms:** m-Cresol Purple water-soluble; m-Cresolsulfonphthalein Sodium Salt  
**CAS No.:** 62625-31-4  
**Formula:** C$_{21}$H$_{17}$O$_5$NaS

**F.W.:** 404.42  
**Appearance:** Dark orange powder and/or crystals  
**Identification:** Conforms to structure and standard  
**Visual Transition Interval:** pH 1.2 (Red) to pH 2.8 (Yellow)  
**pH 7.4 (Yellow) to pH 9.0 (Purple)**

**Solubility (1 mg/ml, H$_2$O):**  
**Dye content:** > 65.0%  
**Melting Point:** 140 - 145 Deg. C  
**Solubility:** 2% in water, 1% in ethanol  

---

**CRESYL RED SODIUM SALT**  
Product#12157  
**Synonyms:** o-Cresol Water Soluble; o-Cresolsulfonphthalein Sodium Salt  
**CAS No.:** 62625-29-0  
**Formula:** C$_{21}$H$_{17}$NaO$_5$S

**F.W.:** 404.42  
**Appearance:** Orange to orange-brown to very dark brown Crystalline powder and/or crystals  
**Solubility (1 mg/ml, H$_2$O):** Clear, deep red solution  
**Dye content:** > 65.0%  
**Melting Point:** 140 - 145 Deg. C  
**Solubility:** 2% in water, 1% in ethanol  

---

**CRESYL VIOLET ACETATE CERTIFIED**  
Product#12166  
**Synonyms:** Cresyl echt violet; Cresyl violet acetate oxazine 9.  
**CAS No.:** 10510-54-0  
**Formula:** C$_{18}$H$_{15}$N$_3$O$_3$

**F.W.:** 321.34  
**Appearance:** Dark-green to almost black powder  
**Identification:** To pass test  
**Lambda Max:** 596 - 599 nm (in 50 % Ethanol)  
**Dye content:** > 65.0%  
**Solubility:** 2% in water, 1% in ethanol  

**CROCEIN ORANGE G**  
Product#12168  
**Synonyms:** 1-Phenylazo-2-naphthol-6-sulfonic acid sodium salt; C.I. 15970; Acid Orange 12; Ponceau 4 GB  
**CAS No.:** 1934-20-9  
**Formula:** C$_{16}$H$_{11}$N$_2$NaO$_4$S

**Appearance:** Metallic Green Powder  
**Lambda Max:** 570 (367) nm in water  
**Visual Transition Intervals:** pH 2.0 (Orange) to pH 3.0 (Yellow)  
**pH 7.2 (Yellow) to pH 8.8 (Red)**

**Dye content:** > 65.0%  
**Melting Point:** 140 - 145 Deg. C  
**Solubility:** 2% in water, 1% in ethanol  

---

**CRESOL RED FREE ACID**  
Product#12152  
**Synonyms:** Cresol Red Ethanol; CresolSulfonphthalein  
**CAS No.:** 1733-12-6  
**Formula:** C$_{21}$H$_{18}$O$_5$S

**F.W.:** 382.43  
**Appearance:** Metallic Green Powder  
**Lambda Max:** 570 (367) nm in water  
**Visual Transition Intervals:** pH 2.0 (Orange) to pH 3.0 (Yellow)  
**pH 7.2 (Yellow) to pH 8.8 (Red)**

**Dye content:** > 65.0%  
**Melting Point:** 140 - 145 Deg. C  
**Solubility:** 2% in water, 1% in ethanol  

---

**Phone:** 1-732-886-3100  
**Fax:** 1-732-886-3688  
**Email:** dudley@dudley-chem.com
DUDLEY CHEMICAL

CROCEIN SCARLET 7B (ACID RED 71)  Product#12171

Synonyms: Acid Red 71; C.I. 27165
CAS No.: 6226-76-2
Formula: C_{24}H_{18}N_{4}Na_{2}O_{7}S_{2}

Appearance: Red-orange to orange powder
Identification: To pass test
Loss on drying @110 deg. C/1hr: < 20.0%
Solubility: Soluble in water; moderately soluble in acetone, methyl Cellosolve and ethanol.
Absorptivity 1%/1cm (Water) At Lambda Max: 485.0 nm in water

F.W.: 350.32

CRYSTAL SCARLET C.I. 16250  Product#12179

Synonyms: C.I. 16250; Acid Red 44; Ponceau 6R; Crystal Ponceau 6R; Brilliant Crystal Scarlet
CAS No.: 2766-77-0
Formula: C_{20}H_{12}N_{2}Na_{2}O_{7}S_{2}

Appearance: Dark brown powder
Identification: To pass test
Melting Point: > 300 Deg. C
Lambda Max: 509-514 nm
Dye content: ~ 80%
Solubility 0.1% (Water): Clear red solution
Loss on drying at 110 Deg. C/ 1 hour: < 20.0%

F.W.: 502.43

CRYSTAL SCARLET CERTIFIED  Product#12186

Synonyms: Basic Violet 3; C.I. 42555; Hexamethylpararosaniline Chloride; Gentian Violet
CAS No: 548-62-9
Formula: C_{25}H_{30}CIN_{3}

Appearance: Green to Green-Brown Powder
Identification: Green to Green-Brown Powder
Assay (on anhydrous basis): 96.0 % - 100.5%
Assay (as is): > 88%
Lambda max.: 589 – 594 nm
Ratio of absorbances: 0.98 – 1.20
Loss on Drying 105 Deg.C/1hr: < 7.5 %
Residue on Ignition: <1.5%
Sensitivity as indicator: To pass Test
Visual Transition Interval: From pH 0.0 (yellow) To pH 2.0 (violet)
Lead (Pb): 0.003% maximum
Zinc (Zn): 0.050% maximum
Alcohol-insoluble substances: <1.0%
Note: Certified by the Biological Stain Commission

F.W.: 407.99

CRYSTAL VIOLET LACTONE  Product#12201

Synonyms: 6-Dimethylamino-3,3-bis(4-dimethylaminophenyl)phthalide
CAS No.: 1552-42-7
Formula: C_{25}H_{30}OClN_{3}

Appearance (form): Powder

F.W.: 415.53
Infrared spectrum: Conforms to structure
Wavelength: 269-275 nm c=0.01g/l Methanol
Extinction Coefficient: ≥50000
Carbon: 72.4 – 77.8%
Nitrogen: 9.6-10.5%

CURCUMIN C.I. 75300

Synonyms: Natural Yellow 3; C.I. 75300; (E,E)-1,7-bis(4-Hydroxy-3-methoxyphenyl)-1,6-heptadiene-3,5-dione; Diferuloylmethane.
CAS No: 458-37-7
Formula: C_{21}H_{20}O_{6}
F.W.: 368.39
Appearance: Yellow to orange powder tasteless powder
Identification: Conforms to structure and standard
Loss on drying @105 deg.C: 2.0% maximum
Assay (on dried basis): 98% minimum
Solubility (10 mg/ml in ethanol): Clear - hazy yellow - orange solution
UV-Vis Spectrum: Maximum absorbance at approx. 430nm
Visual Transition Interval: From pH 7.4 (yellow) to pH 8.6 (red)
From pH 10.2 (red) to pH 11.8 (orange)

1-DECANESULFONIC ACID SODIUM SALT HPLC

Synonyms: Sodium decane-1-sulfonate
CAS No: 13419-61-9
Formula: C_{10}H_{21}O_{3}Na
F.W.: 244.33
Appearance: Fine white to off-white powder
Assay: 99.0 % minimum
Water: < 1%
Solubility (5 % Water): Clear, colorless solution
Maximum absorbency (UV 0.20 M Solution):
210 nm < 0.05 AU
220 nm < 0.03 AU
230 nm < 0.02 AU
260 nm < 0.02 AU

2,7-DIBROMOFLUORESCINE

Synonyms: Solvent Red 72; C.I. 45370:1
CAS No: 596-03-2
Formula: C_{10}H_{19}Br_{2}O_{5}
F.W.: 490.12
Appearance: Orange powder
Identification: Conforms to structure and standard
Dye content: ~95%
Melting Point: 270-275 Deg. C (lit.)
Lambda max.: 450nm in methanol
Loss on drying @100 deg.C: 5.0% maximum
Solubility 10 mg/ml, 0.5N NH4OH (heat): Clear yellow to slightly dark Orange solution

2,6-DIBROMOPHENOL

Synonyms: Phenol, 2,6-dibromo
CAS No: 608-33-3
Formula: C_{6}H_{4}Br_{2}O
F.W.: 251.90
Appearance: Off-white to light-grey to ash-colored powder
Identification: To conform to standard
Assay (GLC): 99.0 % minimum
Melting Point: 53 - 58 Deg. C
Boiling Point: 255 - 256 Deg. C @ 740 mm Hg

2,7 – DICHLOROFUORESCINE ACS

Synonyms: 2,7-Dichloro-3,6-fluorandiol; 2,7-Dichloro 3,6-dihydroxyspiro[isobenzofuran-1(3H),9’[9H]xanthen]-3-one
CAS No: 76-54-0
Formula: C_{20}H_{10}Cl_{2}O_{5}
F.W.: 401.20
Appearance: Orange to Red-Brown powder
Identification (IR): To conform to standard
Clarity of alcohol solution: Passes Test
Suitability as adsorption indicator: Passes test

2,3 – DICHLOROBENZOIC ACID

Synonyms: Benzoic acid, 1,3-dichloro
CAS No.: 50-45-3
Formula: C_{6}H_{4}Cl_{2}O_{2}
3,5 – DICHLOORO-2-HYDROXYBENZENESULFONIC ACID SODIUM SALT
Product#14127

Synonyms: HDCBS
C.A.S.: 54970-72-8
Formula: Cl₂C₆H₂(OH)SO₃Na
F.W.: 265.05

Appearance: White sparkling flakes or powder
Assay (Titration): 98.5% - 101.5%
(with AGNO₃ after oxygen combustion)
Assay (HPLC): 98.5% minimum
Moisture: 1% maximum
Solubility(5% in water): Clear, colorless solution
Elemental Analysis: Carbon 26.8 – 27.6%

2,6 – DICHLOROINDOPHENOL SODIUM SALT
Product#14130

Synonyms: 2,6-dichloro-4[(4-hydroxyphenyl)imino]-2,5-cyclohexadien-1-one sodium salt
CAS No: 620-45-1
Formula: O:C₆H₂Cl₂:NC₆H₄ONa
F.W.: 290.08

Appearance: Dark green powder
Identification: Conforms to structure
Loss on drying: <12.0 %
Interfering dyes: The specified mixture is nearly colorless with no trace of red or blue
Solubility 0.1% (50% EtOH+1N 1ml Na₂CO₃): Clear blue solution

2,6 – DICHLOROPURINE
Product#14152

Synonyms: 1H-Purine,2,6-dichloro-
CAS No: 5451-40-1
Formula: C₅H₂Cl₂N₄
F.W.: 189.00

Appearance: White to off-white crystalline powder
Identification: Conforms to structure and standard
Assay (HPLC): 98.0 % minimum
Loss on drying: 0.50% maximum
Heavy metals: 10 ppm maximum
Residue on Ignition: 0.10% maximum
Solubility(50 mg/ml, Ethanol): Clear, colorless, colorless to pale yellow solution
**DIETHYL SAFRRANINE**  
**Product#14154**  
**Synonyms:** 3-Amino-7-[diethylamino]-5-phenyl phenazium chloride, Methylene Violet 3 RAX  
**CAS No:** 4569-86-2  
**Formula:** C_{22}H_{23}ClN_{4}  
**F.W.:** 378.91  
**Appearance:** Green crystalline powder  
**Melting Point:** 285°C  
**Lambda Max:** 557 nm in water

**N,N-DIETHYL-P-PHENYLENEDIAMINE OXALATE**  
**Product#14160**  
**Synonyms:** p-Amino-diethylaniline oxalate  
**CAS No:** 62637-92-7  
**Chemical Formula:** \([\{(C_{2}H_{5})_{2}NC_{6}H_{4}NH_{2}\}\}_{2}(COOH)_{2}\)  
**F.W.:** 418.55  
**Appearance:** Off-white - beige - yellow to light purple gray powder  
**Assay (Titration):** 85 % minimum  
**Identification:** Passes Test  
**Moisture:** 1.0% maximum

**2,4-DIHYDROXYBENZALDEHYDE, 98%**  
**Product#14162**  
**Synonyms:** Greekbeta-Resorcylaldehyde  
**CAS No:** 95-01-2  
**Formula:** C_{7}H_{6}O_{3}  
**F.W.:** 138.12  
**Appearance:** Off-white to tan to light red powder  
**Identification:** Conforms to structure and standard  
**Assay (HPLC):** 98.0% minimum  
**Melting Point:** 44 - 48 Deg. C  
**Boiling Point:** 220 – 228 deg. C @ 22 mm Hg  
**Storage Information:** Air sensitive

**3,5-DIMETHOXYBENZALDEHYDE, 98%**  
**Product#14169**  
**Synonyms:** Benzaldehyde, 3,5-Dimethoxy  
**CAS No:** 7311-34-4  
**Formula:** C_{9}H_{10}O_{3}  
**F.W.:** 166.18  
**Appearance:** White to beige to yellow powder or crystals.  
**Infrared spectrometry:** Conforms to standard.  
**Melting Point:** 44 - 48 Deg. C  
**Assay (GC):** >97.5

**2,3-DIMETHOXYBENZOIC ACID**  
**Product#14171**  
**Synonyms:** O-Veratric Acid  
**CAS No:** 1521-38-6  
**Formula:** (CH_{3}O)_{2}C_{6}H_{3}CO_{2}H  
**F.W.:** 182.18  
**Appearance:** White to Off-white or beige crystalline powder  
**Assay (NaOH Titration):** 99.0% minimum  
**Melting Point:** 121 °C to 125 °C  
**Loss on drying:** 0.5% maximum

**2,5-DIMETHOXYBENZOIC ACID**  
**Product#14175**  
**Synonyms:** Gentisic Acid Dimethyl ester  
**CAS No:** 2785-98-0  
**Formula:** C_{9}H_{10}O_{4}  
**F.W.:** 182.18  
**Appearance:** White crystalline powder  
**Assay:** 98.0 %  
**Melting Point:** 76 - 79 deg. C

**3,4-DIMETHOXYBENZOIC ACID**  
**Product#14178**  
**Synonyms:** Veratric Acid  
**CAS No:** 93-07-2  
**Formula:** (CH_{3}O)_{2}C_{6}H_{3}CO_{2}H

**DUDLEY CHEMICAL**

** powder and/or chunks.**  
**Assay (GC):** 98.5 % minimum  
**Melting Point:** 54 - 57 Deg. C  
**Boiling Point:** 178 Deg. C (20mm Hg)  
**Solubility(25 mg/ml CHCl3):** Clear, very faint tan solution

Phone: 1-732-886-3100     Fax: 1-732-886-3688     Email: dudley@dudley-chem.com
4-(DIMETHYLAMINO)BENZALDEHYDE ACS Product#14191

Synonyms: p-Dimethylaminobenzaldehyde ACS
CAS No: 100-10-7
Formula: \((\text{CH}_3)_2\text{N}\text{C}_6\text{H}_4\text{CHO}\)

Appearance: White to off-white to light yellow fine crystals
Assay (GC): 98.0% minimum
Melting Point: 73 - 75 °C
Residue after ignition: 0.1 % maximum
Solubility in alcohol: To pass test
Color (APHA) of alcohol solution: 60 APHA maximum
Solubility in hydrochloric acid: To pass test

5-[4-(DIMETHYLAMINO)BENZYLIDENE]RHODANINE Product#14196

Synonyms: p-(Dimethylamino)Benzal-5-Rhodanine
CAS No: 536-17-4
Formula: \(\text{C}_{12}\text{H}_{12}\text{N}_2\text{O}_2\)

Appearance: Orange to red to purple powder
Assay: 97.0 % minimum
Melting Point: 282.0 - 288.0 Deg. C
Absorbance (Lambda max.): 451nm in methanol
Carbon: 52.6% - 56.4%
Nitrogen: 10.2% - 11.0%

3-(DIMETHYLAMINO)PHENOL 97% Product#14199

Synonyms: n,n-Dimethyl-3-aminophenol
CAS No: 99-07-0
Formula: \(\text{C}_8\text{H}_11\text{NO}\)

Appearance: Grey, brown to purple crystalline powder
Assay: >99.0% (NaOH titration)
Water content: 40% minimum
**N,N-DIMETHYL-P-PHENYLENEDIAMINE 1 HCL**

Product#14215

Synonyms: 4-(Dimethylamino)aniline monohydrochloride
CAS No.: 2052-46-2
Formula: C_8H_{12}N_2\*HCl

- Appearance: Off-white to grey to pink crystalline powder or chunks
- Assay: 97% minimum
- Identification: Conforms to structure and standard.
- Solubility (50 mg/ml, H2O): Clear to slightly hazy, pink to red-purple solution
- Melting Point: 215 Deg. C (dec)

**DIMIDIUM BROMIDE**

Product#14222

Synonyms: 3, 8-Diamino-5-methyl-6-phenylphenanthridinium bromide
CAS No.: 518-67-2
Formula: C_{20}H_{18}BrN_3

- Appearance: Maroon to dark purple to black powder
- Identification: Conforms to structure and standard.
- Assay: 95.0 – 106.0% (Silver Nitrate Titration)
- Loss on drying: 5% maximum
- pH: 6 - 7
- Solubility: Clear to slightly hazy dark orange to red-orange (1 g in 100 ml H2O) to dark red solution.
- Melting Point: 69 °C to 71 °C

**2,4-DINITROBENZALDEHYDE**

Product#14229

Synonyms: Benzaldehyde, 2,4-dinitro-
CAS No.: 528-75-6
Formula: C_7H_4N_2O_5

- Appearance: Buff crystalline powder
- Appearance of Solution (5% in methanol): Clear, very pale yellow
- Assay (HPLC): 98% minimum
- Melting Point: 69 °C to 71 °C

---

**DIPHENYLAMINE ACS**

Product#14234

Synonyms: N-Phenylbenzeneamine
CAS No: 122-39-4
Formula: (C_6H_5)2NH

- F.W.: 169.23
- Appearance: Orange Powder
- Solubility: 2.5% in Methanol; Clear, Red or Red-Orange Solution
- Carbon: 62.0% - 68.0%
- Nitrogen: 22.0% - 25.0% For Colorimetric Analysis
- Sensitivity: To Pass test
- Solubility in Acetone: To pass test
- Residue after ignition: 0.1 % maximum
- Boiling Point: 302 Deg. C/760 mm Hg

**1,5-DIPHENYLCARBOHYDRAZIDE ACS**

Product#14271

Synonyms: 1,5-Diphenylcarbazide; 5-diphenylcarbazide, DPC
CAS No: 140-22-7
Formula:C_{13}H_{14}N_4O

- F.W.: 242.28
- Appearance: Off-White crystals
- Assay (HPLC): 97% minimum
- Melting point: 173 - 176 deg. C
- Residue after ignition: 0.05g in 100ml at 25 DegC: To pass Test
- Boiling Point: 302 Deg. C/760 mm Hg
- Sensitivity to Chromate: To pass Test
- Solubility in aqueous acetone: To pass Test
**DIPHENYL CARBONATE, 99%**  
Product#14280

Synonyms: Phenyl Carbonate  
CAS No.: 102-09-0  
Formula: \((\text{C}_6\text{H}_5\text{O})_2\text{CO}\)

**Appearance:** White powder, chips or chunks  
**Assay (GC):** 99.0% minimum  
**Phenol (Chemical method):** 0.1% maximum  
**Water:** 0.1% maximum  
**pH:** 6.8-7.2  
**Melting Point:** 78-81 °C  
**Boiling Point:** 301-302 °C  
**Iron (Fe):** 3 ppm maximum  
**Solubility (100 mg/ml CCl₃):** Clear, colorless solution  
**F.W.:** 214.22

**5,5'-DITHIOBIOS(2-NITROBENZOIC ACID), 99%**  
Product#14502

Synonyms: 3-Carboxy-4-nitrophenyl disulfide; DTNB; Ellmann’s Reagent  
CAS No: 69-78-3  
Formula: \(\text{C}_4\text{H}_8\text{N}_2\text{O}_5\text{S}_2\)

**Appearance:** Off-White to yellow powder  
**Assay (Titration):** 99.0% minimum  
**Identification:** To Pass Test  
**Melting Point:** 230-245 Deg. C  
**Loss on drying:** 0.5% maximum  
**Solubility (1%, Ethanol):** Clear, light yellow solution  
**F.W.:** 396.34

**2,5-DIPHENYLOXAZOLE, 99%**  
Product#14290

Synonyms: PPO  
CAS No.: 92-71-7  
Formula: \(\text{C}_{15}\text{H}_{11}\text{NO}\)

**Appearance:** White crystalline powder  
**Identification (IR):** Conforms to structure  
**Assay (TLC):** 99 % minimum  
**Solubility (40% in toluene):** Clear and colorless  
**Melting point:** 70°C to 72°C  
**F.W.:** 221.26

**DITHIOOXAMIDE 98%**  
Product#14527

Synonyms: Dithiooxalic diamide; Rubeanic acid  
CAS No: 79-40-3  
Formula: \(\text{NH}_2\text{CSCS}\text{NH}_2\)

**Appearance:** Orange, red or brown crystalline powder  
**Identification (IR):** Conforms to structure and standard  
**Assay:** 98% minimum  
**Melting Point:** > 300 Deg. C  
**Residue on Ignition:** 0.1% maximum  
**F.W.:** 120.20

**DIRECT BLUE 71 C.I. 34140**  
Product#14351

Synonyms: Benzo Light Blue FFL; Sirius Light Blue BRR; 1,5-Naphthalenedisulfonic Acid; 3-4-4-(6-Amino-1-Hydroxy-3-Sulfate);  
CAS No.: 4399-55-7  
Formula: \(\text{C}_{40}\text{H}_{27}\text{N}_7\text{O}_{13}\text{S}_4\)

**Appearance:** Black powder  
**Lambda max.:** 594nm in water  
**Dye content:** ~50%  
**F.W.:** 1029.88

---

*Phone: 1-732-886-3100   Fax: 1-732-886-3688   Email: dudley@dudley-chem.com*
DUDLEY CHEMICAL

DUDLEY CHEMICAL

DO DECYL GALLATE
Product#18540

Synonyms: Lauryl gallate; Dodecyl 3,4,5-trihydroxy-benzoate; Gallic acid, lauryl ester
CAS No: 1166-52-5
Formula: $C_{19}H_{30}O_5$

Appearance: White to cream-colored powder, Odorless.
Assay: 98% minimum
Melting Point: 96 - 100 Deg. C
Loss on drying: < 0.50%
Free Acid (as Gallic Acid): < 0.50%
Residue on Ignition: < 0.50%
Arsenic (As): < 3 mg/kg
Lead (Pb): < 10 mg/kg
Heavy metals (as Pb): < 30 mg/kg
Sulfated Ash: < 0.05%
Solubility: Insoluble in water, soluble in ethanol and in ether.

EOSIN B SPIRIT SOLUBLE
Product#19246

Synonyms: Acid Red 91; C.I. 45400
CAS No: 56360-46-4
Formula: $C_{20}H_{8}N_2O_9Br_2$

Appearance: Bright orange Powder
Dye content: ~95%
Lambda Max: 522 nm (In Methanol)
Visual Transition Interval: pH 1.4 (none) to pH 2.4 (fluorescent pink)
Melting Point: 275 deg. C

EOSIN B CERTIFIED C.I. 45400
Product#19251

Synonyms: Acid Red 91; 4',5'-Dibromo-2',7'-Dinitrofluorescein, Disodium Salt; Eosin Bluish; C.I. 45400
CAS No: 548-24-3
Formula: $C_{20}H_6N_2O_9Br_2$

Appearance: Brownish-Green Powder
Lambda max: 514 (395) nm (In Water plus 1% Na2CO3)
Visual Transition Interval: pH 0.0 (colorless) to pH 2.4 (fluorescent pink)
Dye Content: 85% minimum
EOSIN Y DISODIUM SALT ACS
Product#19252

Synonyms: Acid red 87
CAS No.: 17372-87-1
Formula: C_{20}H_{6}Br_{4}Na_{2}O_{5}

Appearance: Dark red-brown (rust) powder
Solubility 0.1% (in water): Clear, yellow-orange to red solution
Solubility: Soluble in water, slightly soluble in methanol and ethanol.

EOSIN Y DISODIUM SALT CERTIFIED C.I. 45380
Product#19256

Synonyms: Acid Red 87; C.I. 45380; Bronze Bromo ES; 2′4′5′7′-tetra bromofluorescein, Disodium Salt; Bromofluorescein; Eosin yellowish
CAS No.: 17372-87-1
Formula: C_{20}H_{6}Br_{4}Na_{2}O_{5}

Appearance: Dark red-brown (rust) powder
Solubility 0.1% (in water): Clear, yellow-orange to red solution
Solubility: Soluble in water, slightly soluble in methanol and ethanol.

EOSIN Y FREE ACID C.I. 45380:2
Product#19258

Synonyms: 2′4′5′7′-Tetrabromofluorescein; Eosin; Solvent Red 43
CAS No: 15086-94-9
Formula: C_{20}H_{8}Br_{4}O_{5}

Appearance: Orange Powder
Solubility: E & OH 10 mg/ml
Lambda Max: 521 nm in Water & 1 ml 1N sodium carbonate

ERICHROME BLACK T ACS
Product#19300

Synonyms: 3-Hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-1-naphthalenesulfonic Acid, Monosodium Salt; Mordant Black 11
CAS No: 1787-61-7
Formula: C_{26}H_{14}N_{2}NaO_{5}S

F.W.: 647.92

Solubility in Water: Passes Test
Wavelength of Max Absorption (in pH9 Water): 565 nm

ERICHROME CYANINE R (C.I. 43820)
Product# 20323

Synonyms: Mordant Blue 3; Chromoxane Cyanine R; Solochrome Cyanine R
CAS No: 3564-18-9
Formula: C_{23}H_{15}Na_{3}O_{9}S

F.W.: 536.40

ERICHROME BLUE BLACK R (C.I. 15705)
Product# 20320

Synonyms: C.I. 15705; Eriochrome Blue Black R; Mordant Black 17; Zinchrome R
CAS No: 2538-85-4
Formula: C_{20}H_{13}N_{2}O_{5}SNa

F.W.: 416.39

Solubility in Water: Passes Test
Wavelength of Max Absorption (in pH9 Water): 565 nm
Lambda Max: 435 nm in pH 7 aqueous buffer 512 nm in methanol  
Dye content: ~ 50%  
Visual transition Interval: From pH 1.0 (yellow-orange)  
  To pH 2.0 (red)  
  From pH 6.0 (red)  To pH 7.0 (yellow)  
  From pH 11.0 (yellow) To pH 12.0 (blue)  
Solubility: 5% in water  2% in ethanol

ERIOGLAUCINE C.I. 42090  Product# 20336

Synonyms: C.I. 42090, Brilliant Blue FCF  
CAS No: 3844-45-9  
Formula: C_{37}H_{34}N_{2}Na_{2}O_{9}S_{3}  
F.W.: 792.86

Appearance: Purple Powder  
Lambda Max: 625 (406) nm (in Water)  
Water-insoluble Matter: 0.20% maximum  
Subsidiary dyes: 6.00% maximum  
Heavy metals (as Pb) (mg/kg): 40.00 maximum  
Arsenic (mg/kg): 3.00 maximum  
Lead (mg/kg): 10.00 maximum  
Mercury (mg/kg): 1.00 maximum  
Cadmium (mg/kg): 1.00 maximum  
Solubility (1 mg/ml, H2O): Clear to opaque blue to blue-black solution

ERYTHROSIN B SPIRIT SOLUBLE  Product# 20350

Synonyms: Solvent Red 140; 2,4,5,7-Tetraiodofluorescein  
CAS No.: 15905-32-5  
Formula: C_{20}H_{8}I_{4}O_{5}  
F.W.: 835.90

Appearance: Red to red-orange powder  
Dye content: 95.0% minimum  
Loss on drying @ 135°C: 5.0% maximum  
Solubility (0.05%, MeOH): Clear orange solution  
Lambda max.: 533nm in methanol  
Heavy Metals (as Pb): 40 mg/kg maximum

ERYTHROSIN B CERTIFIED  Product# 20353

Synonyms: C.I. 45430; Acid Red 51; Tetraiodofluorescein sodium salt  
CAS No.: 16423-68-0  
Formula: C_{20}H_{4}Na_{2}O_{5}  
F.W.: 879.87

Appearance: Dark Red to maroon to brown powder  
Dye content: >80%  
Water insoluble matter: < 0.20%  
Subsidiary dyes: < 4.00%  
Tri-iodoresorcinol: < 0.20%  
Inorganic iodides as Sodium Iodide: < 0.10%  
Solubility (10 mg/ml, H2O): Clear, red-orange to red solution  
Spectroscopy: ~525 nm  
Visual Transition Interval: From pH 0.0 (yellow)  
  To pH 3.5 (fluorescent red)

ETHACRIDINE LACTATE MONOHYDRATE  Product# 20385

Synonyms: 6,9-Acridine diamine; 2-Ethoxy-,2-Hydroxypropanote;  
Acrinol; Ethodin  
CAS No.: 6402-23-9  
F.W.: 361.40

Appearance: Yellow powder  
Melting Point: 243 °C to 245 °C  
Assay: ~99%

ETHIDIUM BROMIDE  Product# 20420

Synonyms: Homidium Bromide; EtBr;  
3,8-Diamino-5-ethyl-6-phenylphenanthridinium bromide  
CAS No: 1239-45-8  
F.W.: 394.31

Appearance: Dark Red to purple crystalline powder  
Identification: Conforms to standard and structure  
Assay: > 95.0%  
Loss on drying @105 Deg.C: 5% maximum  
ph (2.0% w/v in H2O): 4 to 7  
Melting Point: 260 – 262 Deg. C  
Solubility (10 mg + 1 ml of H2O): Red solution

(ETHYLENEDINITRIL0)TETRAACETIC ACS (EDTA)  Product# 20430

Synonyms: Ethylenediaminetetraacetic Acid ACS;  
EDTA Free Acid; Edetic acid.  
CAS No: 60-00-4
**DUDLEY CHEMICAL**

**ETHYL GALLATE**
Product# 20470

Synonyms: 3,4,5-Trihydroxybenzoic acid ethyl ester; Ethyl 3,4,5-trihydroxybenzoate; Gallic acid ethyl ester

CAS No: 831-61-8
Formula: C₉H₁₀O₅

Appearance: White to Slightly Beige fine powder
Melting Point: 149-153°C
Solubility: Soluble in water
Flash Point: 185 °C
Boiling Point: 447.3°C at 760 mmHg

**ETHYL ORANGE SODIUM SALT**
Product# 20507

Synonyms: 4-(4-Diethylaminophenylazo)benzene-sulfonic acid, sodium salt
CAS No: 62758-12-7
Formula: C₁₈H₁₄N₃NaO₃S

Appearance: Orange Powder
Loss on drying (110°C/1hr): Report
Lambda Max: 475.0 nm (in water)
Visual Transition Interval: From pH 3.4 (rose-red) To pH 4.8 (yellow)
Solubility 0.1% (water): Clear orange solution

**ETHYL RED**
Product# 20582

Synonyms: 2-(4-Diethylaminophenylazo)benzoic acid
CAS No: 76058-33-8
Formula: C₁₇H₁₉N₃O₂

Appearance: Dark red to maroon powder
Identification (IR): To conform to structure
Melting Point: ~135 Deg. C (dec.)
Visual Transition Interval: From pH 4.5 (red) To pH 6.5 (yellow)
Solubility (1 mg/ml H₂O): Clear, dark red solution
Residue on Ignition: 0.2% maximum

**ETHYL VIOLET C.I. 42600**
Product# 20602

Synonyms: C.I. 42600; Basic Violet 4
CAS No: 2390-59-2
Formula: C₁₁H₁₄N₃Cl

Appearance: Dark red to maroon powder
Lambda max.: 532nm in 50% ethanol
Loss on drying(at 105 Deg. C): 5% maximum
Solubility (1 mg/ml 95% ETOH): Clear pink-orange solution
DUDLEY CHEMICAL

EVANS BLUE C.I. 23860

Product# 20700

Synonyms: C.I. 23860; Direct Blue 53
CAS No: 314-13-6
Formula: C34H24N6Na4O14S4
F.W.: 960.82

Appearance: Dark brown to black to brownish-red to purple crystalline powder
Loss on drying (110°C/1hr): < 10%
Solubility (0.1% H2O): Clear blue solution
Assay on absorptivity bases: >85%
Absorptivity 1%/1cm At Lambda Max 608 nm: >650

FAST GARNET GBC SALT

Product# 21020

Synonyms: Azoic Diazo No. 4; C.I. 37210
CAS No.: 101-89-3
Formula: C14H14N4O4S
F.W.: 334.35

Appearance: Dark orange to reddish-brown powder
Lambda max.: 360nm in water
Dye content: ~75%
Solubility (5 mg/ml in H2O): Clear, orange to brown solution

FAST GREEN F.C.F CERTIFIED C.I. 42053

Product# 21102

Synonyms: Food green 3; Aizen Food Green No. 3; C.I. 42053; FD&C Green No. 3; Solid Green FCF; 1724 Green
CAS No: 2353-45-9
Formula: C37H34N2O10S3Na2
F.W.: 808.86

Appearance: Red to brown Powder
Identification: To pass test
Spectroscopy(in 50% aqueous ethanol): Lambda max.622 + 3 nm
Water-insoluble matter: 0.20% maximum
Lead (Pb): 10 mg/kg maximum
Solubility 1 mg/ml in H2O: Dark blue-green solution

FAST VIOLET B SALT

Product# 21110

Synonyms: 4-Benzoylamino-2-methoxy-5-methylbenzenamine
Azoic Diazo No. 41
CAS No.: 99-21-8
Appearance: Yellow Crystalline Powder
Formula: C15H14N3O2.BF4
F.W.: 355.10

Assay (ex. N): 90.0% Minimum
Loss on drying: 1.0% Maximum

FAST SULPHON BLACK F

Product# 21140

Synonyms: Acid Black 32; C.I. 26990
CAS No.: 3682-47-1
Formula: C30H17N4O11S3Na3
F.W.: 774.6

Appearance: Black powder
Purity (TLC): 95.0% minimum
Application: Suitable as an indicator for EDTA titration.
Solubility: Dark green solution at 4 mg plus 4.0 ml Of water

FAT BROWN RR

Product# 21171

Synonyms: Solvent Brown 1; C.I. 11285
CAS No.: 6416-57-5
Formula: C18H18N4
F.W.: 262.31
DUDLEY CHEMICAL

FLUORENE 99%

Synonyms: 9H-Fluorene; O-Biphenylenemethane; O-Biphenylmethane; Di-Phenylmethene; 2,2'Methylenebiphenyl
CAS No: 86-73-7
Formula: C_{13}H_{10}

F.W.: 166.22
Appearance: White to off-white crystalline powder
Assay: > 99 %
Melting Point: 114 - 117 deg. C
Boiling Point: 298 / 760 deg. C
Loss on drying: < 0.50%

FERROUS SULFATE HEPTAHYDRATE ACS

Synonyms: Greenvitrol; Ferrous Sulfate Heptahydrate; Iron protosulfate
CAS No: 7782-63-0
Formula: FeSO_{4} \cdot 7H_{2}O

Appearance: Blue-green crystals
Assay: > 99 %
Melting Point: ~ 65 Deg. C
Insoluble matter: 0.01 % maximum
Chloride (Cl): 0.001 % maximum
Phosphate (PO4): 0.001% maximum
Calcium (Ca): 0.005% maximum
Copper (Cu): 0.005 % maximum
Magnesium (Mg): 0.002% maximum
Manganese(Mn): 0.05 % maximum
Potassium (K): 0.002% maximum
Sodium (Na): 0.02% maximum
Zinc (Zn): To pass test
Ferric Ion (Fe3+): 0.1 % maximum
Aqueous solubility: 48.6 g in 100 ml at 50 Deg. C

FLAVIANIC ACID HYDRATE

Synonyms: 8-Hydroxy-5,7-dinitro-2-naphthalene-sulfonic acid, Naphthol Yellow S
CAS No.: 483-84-1
Formula: C_{10}H_{6}N_{2}O_{8}S*xH_{2}O

Appearance: Yellow chips, crystals or powder And/or chunks
Identification: To pass test
Assay (HPLC): 97.5 % minimum
Melting Point: 81 - 85 deg. C
Boiling Point: 342 / 760

FLUORESCIN USP C.I. 45330:1

Synonyms: Benzoic Acid, Hydroxy-3-oxo-3H-xanthen-9yl)-; (Carboxyphenyl)-6-hydroxy-3-isoxanthenone; 9-(o-Carboxyphenyl)-6-hydroxy3H-xanth-en-3-one; C.I. solvent yellow 94; 3’6’ Dihydroxysulforan; Dihydroxyfluorane; 3,6-Fluorandiol
CAS No: 2321-07-5
Formula: C_{20}H_{12}O_{5}

Appearance: Yellow to yellow-red to dark orange powder
Assay (Anhydrous Basis): 97 - 102 %
Absorptivity, 1%/1cm at Lambda max 490nm: 2200-2500
Water: 1.0 %
Zinc: To pass test
Acridine: To pass test
Solubility 0.1%(0.1N NaOH): Clear yellow solution with greenish fluorescence
**FLUORESCIN FREE ACID C.I. 45330:1**  Product# 23512

Synonyms: Benzoic Acid, Hydroxy-3-oxo-3H-zanthen-9yl; (Carboxyphenyl)-6-hydroxy-3-isoxanthenone; 9-(o-Carboxyphenyl)-6-hydroxy3H-xanthen-3-one; C.I. solvent yellow 94; 3’6’ Dihydroxyfluoran; Dihydroxyfluorane; 3,6-Fluorandiol;

CAS No: 2321-07-5

Formula: C_{20}H_{12}O_{5}

F.W.: 332.31

Appearance: Yellow to yellow-red to dark orange powder

Assay (Anhydrous Basis): 97 - 102 %

Absorptivity, 1%/1cm at Lambda max 490nm: 2200-2500

Water: 1.0 %

Zinc: To pass test

Acriflavine: To pass test

Solubility 0.1%(0.1N NaOH): Clear yellow solution with greenish fluorescence

**FUOREXON / CALCEIN**  Product# 23701

Synonyms: Bis[N,N-bis(carboxymethyl)aminomethyl]fluorescein; Calcein;Fluorescein complexone; Fluoresceing-methylene-imidiacetic acid

CAS No: 1461-15-0

Formula: C_{16}H_{10}N_{2}O_{13}

F.W.: 622.55

Lambda Max: 499 nm (in NaOH)

Appearance: Orange to orange-yellow powder

**FUORESCIN WATER SOLUBLE C.I. 45350:1**  Product# 23517

Synonyms: C.I. Acid Yellow 73; D&C Yellow No. 8; Fluorescein Sodium

CAS No: 518-47-8

Formula: C_{20}H_{10}O_{5}Na_{2}

F.W.: 376.28

Appearance: Dark brownish-red to dark orange red powder

Identification: To pass tests

Assay: 90.0% - 102.0%

Loss on drying at 135 °C/1hr: 17% maximum

Solubility 1mg/ml in H2O: Clear to slightly hazy dark yellow to brownish Yellow solution with greenish fluorescence.

Lambda Max: 491 nm in Water

**FUORESCIN SODIUM USP C.I. 45350**  Product# 23521

Synonyms: C.I. Acid Yellow 73; D&C Yellow No. 8; Fluorescein W/S

CAS No: 518-47-8

Formula: C_{20}H_{10}O_{5}Na_{2}

F.W.: 376.28

Appearance: Dark brownish-red to dark orange red powder

Identification: To pass tests

Assay: 90.0% - 102.0%

Loss on drying at 135 °C/1hr: 17% maximum

Solubility 1mg/ml in H2O: Clear to slightly hazy dark yellow to brownish Yellow solution with greenish fluorescence.

Lambda Max: 491 nm in Water

**FUORESCIN ACID CALCIUM SALT CERTIFIED**  Product# 24494

Synonyms: Acid fuchsin calcium salt

CAS No: 123334-10-1

Formula: C_{20}H_{19}N_{3}O_{9}S_{3}

F.W.: 579.65

Appearance: Green Crystalline Powder

Dye Content: 65.0% minimum

Lambda max.: 545nm in water +2.5ml 0.1N HCl

Melting Point: 300 °C

Solubility in water: Violet colored clear solution

**FUORESCIN ACID SODIUM SALT CERTIFIED**  Product# 24501

Synonyms: Acid Magenta; Acid Violet 19; C.I. 42685

CAS No: 3244-88-0

Formula: C_{20}H_{17}N_{3}Na_{2}O_{9}S_{3}

F.W.: 585.55

Appearance: Dark-green crystalline powder

Dye Content: 65.0% minimum

Lambda max.: 546nm in water +2.5ml 0.1N HCl

Solubility: 10 – 12.5% in water

0.1 – 0.3% in ethanol Insoluble in xylene.

Visual Transition Interval: From pH 12.0 (red) To pH 14.0 (colorless)
**FUCHSIN BASIC CERTIFIED**

Product# 24523

Synonyms: Basic Violet 14; C.I. 42510
CAS No: 632-99-5
Formula: C$_{20}$H$_{20}$CIN$_3$

F.W.: 337.85

Appearance: Dark-Green Crystalline Powder
Identification: To pass tests
Loss on Drying @110 °C/1hr: 10 % maximum
Dye Content: 88 % minimum
Spectroscopy: 549 nm in 50 % Ethanol
Solubility 0.1 % in 50 % EtOH: Clear solution
Melting Point: 250 Deg. C (dec.)
Visual Transition Interval: From pH 1.0 (purple) to pH 3.1 (red)

**FUCHSIN BASIC Special (for flagella)**

Product# 24528

Synonyms: C.I. 42510
CAS No: 58969-01-0
Formula: C$_{19}$H$_{17}$N$_3$ * HCl

F.W.: 323.82

Appearance: Green crystalline powder
Absorption Max: 546 nm in 50 % Ethanol
Solubility (1 mg/ml, H$_2$O): Clear to opaque, pink to dark red solution
Dye Content: 90 % minimum

**GALLIC ACID ANHYDROUS ACS**

Product# 25799

Synonyms: 3,4,5-Trihydroxyloenzoic acid
CAS No: 149-91-7
Formula: C$_6$H$_2$(OH)$_3$COOH

F.W.: 170.12

Appearance: White crystalline powder
Assay: 98 % minimum
Insoluble matter: 0.01 % maximum
Loss on drying @105°C: 0.5 % maximum
Residue after ignition: 0.05 % maximum
Sulfate (SO$_4$): 0.02 % maximum
Solubility (50 mg/ml in Ethanol): Clear to very slightly yellow solution

**GALLIC ACID MONOHYDRATE ACS**

Product# 25801

Synonyms: 3,4,5-Trihydroxybenzoic acid, 1HY; Gallic acid, 1HY

**GIBBERELLIC ACID**

Product# 26150

Synonyms: Gibberellin A3

**DUDLEY CHEMICAL**

Phone: 1-732-886-3100    Fax: 1-732-886-3688    Email: dudley@dudley-chem.com
DUDLEY CHEMICAL

**GIEMSA STAIN CERTIFIED**

Product# 26201

**Synonyms:** None known
**CAS No.:** 51811-82-6

**Appearance:** Dark green to black powder
**Solubility 0.1% (MeOH):** Dark blue, dark purple or maroon solution
**Melting Point:** 300 °C
**Absorptivity 1%/1cm At Lambda max. 524.0 nm:** >600
**At Lambda max. 651.0 nm:** >950
**Loss on drying At 110 Deg. C/1hour:** 10.0% maximum
**Staining Tests To pass Biological Stain Commission’s Tests**

**GUINEA GREEN B (C.I.42085)**

Product# 26350

**Synonyms:** Acid Green 3
**CAS No.:** 4680-78-8
**Formula:** C_{37}H_{36}N_{2}O_{6}S_{2}

**F.W.:** 690.82

**Appearance:** Dark Green to Dark Purple Powder
**Lambda Max:** 618 - 620 nm
**Solubility:** 1 % in H2O; Dark Blue to Dark Blue-Green Solution

**GUANINE**

Product# 26752

**Synonyms:** 2-Amino-1,7-dihydroxy-6H-purin-6-one; 2-Aminohypoxanthine; Guanin; Guanineenol; 2-Amino-6-Hydroxy purine; 2-Amino-6-purino; C.I. 75170

**CAS No.:** 73-40-5
**Formula:** C_{10}H_{13}N_{5}O_{5}

**F.W.:** 283.24

**Appearance:** White to Light Yellow powder
**Assay (UV):** 97.0% - 103.0%
**Loss on drying:** < 5.0 %
**Residue on Ignition:** < 0.2%
**Heavy metals (as Pb):** <0.001%
**Arsenic (As):** <0.0001%
**Melting Point:** 230 Deg. C. minimum
**Ratio (A250/A260):** <1.30
**(A280/A260)** <0.69
**Solubility at 50 mg/ml in Formic Acid: Water (1:1):** Clear to very slightly hazy Colorless to faint yellow solution

**HEMATOXYLIN CERTIFIED**

Product# 30123

**Synonyms:** Natural Black 1; C.I. 75290
**C.A.S.:** 517-28-2
**Formula:** C_{16}H_{14}O_{6}

**F.W.:** 302.29

**Appearance:** Beige to tan powder
**Assay:** 80% Minimum
**Hematein content:** 0.1% maximum
**Loss on drying:** 6% maximum
**Suitable as Biological Stain: Pass test by Biological Stain Commission**
1-HEPTANESULFONIC ACID SODIUM SALT ANHYDROUS  
HPLC  
Product# 30150

Synonyms: 1-Heptanesulfonic acid sodium salt  
CAS No: 22767-50-6  
Formula: CH₃(CH₂)₆SO₃Na  
F.W.: 202.27  
Appearance: Fine white crystalline powder  
Assay: 99 % minimum  
Water: 2.0 % maximum  
Maximum Absorbancy (UV 0.25M Solution):  
200 nm < 0.300 A.U.  
210 nm < 0.100 A.U.  
220 nm < 0.075 A.U.  
230 nm < 0.050 A.U.  
240 nm < 0.040 A.U.  
250 nm < 0.030 A.U.

1-HEPTANESULFONIC ACID SODIUM SALT MONOHYDRATE HPLC  
Product# 30150

Synonyms: 1-Heptanesulfonic acid sodium salt monohydrate  
CAS No.: 207300-90-1  
Formula: CH₃(CH₂)₆SO₃Na * H₂O  
F.W.: 220.27  
Appearance: Fine white crystalline powder  
Assay: 99 % minimum  
Loss on drying:  7 - 9%  
Solubility (10% aq. Sol.): Clear, colorless solution  
Maximum Absorbancy (UV 0.25M Solution)  
200 nm: <0.300 A.U.  
210 nm: <0.100 A.U.  
220 nm: <0.075 A.U.  
230 nm: <0.050 A.U.  
240 nm: <0.040 A.U.  
250 nm: <0.030 A.U.

1-HEXANESULFONIC ACID SODIUM SALT  
ANHYDROUS  
HPLC  
Product# 30180

Synonyms: Sodium 1-Hexanesulfonate; Sodium hexylsulfonate  
CAS No.: 2832-45-3  
Formula: CH₃(CH₂)₅SO₃Na  
F.W.: 188.22  
Appearance: Fine white crystalline powder  
Assay: 98% minimum  
Loss on drying: < 2.0%  
Maximum Absorbency (UV 0.25 M aq. Solution):  
200 nm: <0.100 A.U.  
210 nm: <0.050 A.U.

1-HEXANESULFONIC ACID SODIUM SALT MONOHYDRATE  
HPLC  
Product# 30184

Synonyms: Sodium 1-Hexanesulfonate, monohydrate; Sodium hexylsulfonate  
CAS No.: 207300-91-2  
Formula: CH₃(CH₂)₅SO₃Na * H₂O  
F.W.: 206.23  
Appearance: Fine white crystalline powder  
Assay: 98% minimum  
Loss on drying:  7 - 9%  
Solubility (10% aq. Sol.): Clear, colorless solution  
Maximum Absorbancy (UV 0.25M Solution)  
200 nm: <0.300 A.U.  
210 nm: <0.100 A.U.  
220 nm: <0.075 A.U.  
230 nm: <0.050 A.U.  
240 nm: <0.040 A.U.  
250 nm: <0.030 A.U.

2-HYDRAZINOBENZOIC ACID HCL 98%  
Product# 31177

Synonyms: 2-Hydrazinebenzoic Acid HCl  
CAS No.: 52356-01-1  
Formula: H₂NNHC₆H₄CO₂H · HCl  
F.W.: 188.61  
Appearance: White to Tan; Powder to Crystals  
Titration: 97.5% - 102.5% (by AgNO₃)  
Melting Point: 185˚ C

4-HYDRAZINOBENZOIC ACID BASE  
Product# 31180

Synonyms: p-Carboxyphenylhydrazine; (4-Carboxyphenyl)Hydrazine; p-Hydrazinobenzoic acid  
CAS No: 619-67-0  
Formula: H₂NNHC₆H₄CO₂H  
F.W.: 152.15  
Appearance: Pale Pink, fine powder  
Assay: 97.0 % minimum
**4-HYDRAZINOBNZOIC ACID HCL**  
Product# 31182

**Synonyms:**  p-Carboxyphenylhydrazine; (4-Carboxyphenyl) Hydrazine Hydrochloride; p-Hydrazinobenzoic acid Hydrochloride

**CAS No:** 24589-77-3

**Formula:** C$_7$H$_8$N$_2$O$_2$·HCl

**F. W.:** 188.61

**Appearance:** Off-white to pale pink fine powder

**Assay (Titration):** 97.0 % minimum

**Loss on Drying:** 1.0 % maximum

**U.V. Analysis (Lambda max. in methanol):** 264nm, Egm = 72.1

**Solubility (1% in methanol):** Clear to almost clear, light yellow to pale brown color, few insolubles.

**5-HYDROXY-2-ADAMANTANONE 98%**  
Product# 31601

**Synonyms:** 1-Hydroxymadamantane-4-one

**CAS Number:** 20098-14-0

**F. W.:** 166.22

**Appearance (Color):** White to Off-White Solid, Powder or Crystals

**Infrared spectrum:** Conforms to Structure

**Proton NMR spectrum:** Conforms to Structure

**Purity (GC):** ≥97.5 %

**3-HYDROXYBENZALDEHYDE**  
Product# 31702

**Synonyms:** Benzaldehyde, n-Hydroxy

**CAS No:** 100-83-4

**Formula:** C$_7$H$_6$O$_2$

**F. W.:** 122.12

**Appearance:** White to off-white crystalline powder

**Assay:** 97.0% minimum

**Identification:** To Pass Test

**Melting Point:** 101-105 Deg. C

**Boiling Point:** 191 Deg. C/50 mm Hg

**Water:** 0.5% maximum

**7-HYDROXYCOUMARIN**  
Product# 32031

**Synonyms:** Umbelliferone

**CAS No:** 93-35-6

**Formula:** C$_9$H$_6$O$_3$

**F. W.:** 162.15

**Appearance:** Off-White to light tan powder

**Identification:** To pass test

**Assay (HPLC):** 99.0 % minimum

**Melting Range:** 223 - 234 deg. C

**Solubility (50 mg/ml, 95% EtOH):** Clear yellow solution

**3-HYDROXY-4-METHYLBENZOIC ACID 98%**  
Product# 32050

**Synonyms:** 3,4-Cresotic acid; 3-Hydroxy-p-toluic acid

**CAS No:** 586-30-1

**Formula:** C$_8$H$_8$O$_3$
Hydroxy Naphtol Blue ACS

Product# 32091

Synonyms: 1-(2-Naphtholazo-3,6-disulfonic acid)-2-naphthol-4-sulfonic Acid, Disodium Salt
CAS No: 165660-27-5
Formula: C_{20}H_{12}N_{2}Na_{2}O_{11}S_{3}

Appearance: White crystalline powder
Assay: 98.0% minimum
Melting Point: 207 - 212 Deg. C
Moisture: 0.5% maximum
Ash: 0.5% maximum

3-Hydroxypicolinic Acid, 98%

Product# 32110

Synonyms: 3-Hydroxy-2-Pyridicarboxylic Acid, 98%
CAS No: 874-24-8
Formula: C_{6}H_{5}NO_{3}

Appearance: Tan to brown crystalline powder
Assay (HPLC): 98.0% minimum
Assay (titration) (NaOH 0.1N): 98.0% minimum
Melting Point: 216 - 221 deg. C
Solubility (0.25 g in 10 ml H_{2}O): Clear, faintly yellow solution
Moisture: 0.5% maximum

6-Hydroxypicolinic Acid, 97%

Product# 32112

Synonyms: 6-Hydroxy-2-Pyridinecarboxylic Acid
CAS No: 19621-92-2
Formula: C_{6}H_{5}NO_{3}

Appearance: Brown crystalline powder
Assay (HPLC): 97.0% minimum
Assay (Titration): 97.0 minimum
Melting Point: 270 deg. C

2-Hydroxypyrrole

Product# 32119

Synonyms: 2 (1H)-Pyridone, 2-Pyridinol
CAS No: 142-08-5
Formula: C_{2}H_{3}NO

Appearance: Off-white to pale yellow crystalline powder
Assay: 98.0% minimum
Melting Point: 102-109 Deg. C  
Boiling Point: 280-281 Deg. C / 760 mm Hg (lit.)  
Moisture: 0.5% maximum  
Solubility (50mg/ml(H2O): Clear to very slightly hazy, light Brown solution. Clear in 5% aqueous solution  
Chloride (Cl): 50 ppm maximum  
Aluminum (Al): 1000 ppb maximum  
Calcium (Ca): 1000 ppb maximum  
Chromium (Cr): 500 ppb maximum  
Cobalt (Co): 500 ppb maximum  
Copper (Cu): 500 ppb maximum  
Gold (Au): 500 ppb maximum  
Iron (Fe): 1000 ppb maximum  
Lead (Pb): 1500 ppb maximum  
Magnesium (Mg): 500 ppb maximum  
Nickel (Ni): 500 ppb maximum  
Potassium (K): 500 ppb maximum  
Silicon (Si): 4000 ppb maximum  
Sodium (Na): 1000 ppb maximum  
Tin (Sn): 500 ppb maximum  
Titanium (Ti): 500 ppb maximum  
Zinc (Zn): 500 ppb maximum  

**2-HYDROXYQUINOLINE**  
Product# 32129

**Synonyms:** Carbostyril; 2-Quinolinol  
**CAS No:** 59-31-4  
**Formula:** C9H7NO  
**F.W.:** 145.16

**Appearance:** Off-white to light brown crystalline powder  
**Assay:** 98 % minimum  
**Melting Point:** 196-199 Deg. C  
**Residue on Ignition:** <0.5%  
**Heavy Metals:** <30 ppm

**5-HYDROXYQUINOLINE**  
Product# 32132

**Synonyms:** 5-Quinolinol 99%  
**CAS No:** 578-67-6  
**Formula:** C9H7NO  
**F.W.:** 145.16

**Appearance:** White to Yellow to Brown Powder or Crystals  
**Titrations:** 98.5% - 101.5% (with HCL04)  
**Melting Point:** 190 - 195 Deg. C  
**Moisture content:** 0.50% maximum

**8-HYDROXYQUINOLINE-5-SULFONIC ACID 1HY**  
Product# 32171

**Synonyms:** 5-Sulfo-8-Hydroxyquinoline  
**CAS No:** 84-88-8 (anhydrous form)  
**Formula:** C9H7NO4S  
**F.W.:** 145.16

**Appearance:** Fine, white to pale yellow crystalline powder. Characteristic odor.  
**Assay:** 99.5% minimum  
**Melting Point:** 72.5 – 74 deg. C  
**Suitability for Magnesium Determination:** To Pass Test  
**Insoluble in Alcohol:** 0.05 % maximum  
**Residue after ignition:** 0.05 % maximum  
**Sulfate (SO4):** 0.02 % maximum

**8-HYDROXYQUINOLINE SULFATE**  
Product# 32146

**Synonyms:** 8-Quinolinol Sulfate Monohydrate  
**CAS No:** 207386-91-2  
**Formula:** C9H7NO.H2O.S  
**F.W.:** 203.20

**Appearance:** Yellow to Dark Yellow Green Powder  
**Titration:** 97.5% - 102.5%  
**Melting Point:** 176˚ C to 179˚ C  
**Solubility:** 100 mg/ml H2O; Clear to Slightly Hazy, Yellow to Yellow-Orange Solution

**DUDLEY CHEMICAL**

Phone: 1-732-886-3100   Fax: 1-732-886-3688   Email: dudley@dudley-chem.com
**IMIDAZOLE ACS**

Product# 33800

Synonyms: 1,3-diazo-2,4-cyclopentadiene; 1,3-Diazole; Formanidine, N,N-vinylene; Glyoxalin; Glyoxaline; Imidazol; Miazole

CAS No: 288-32-4

Formula: NHCH:NCH:CH

**Appearance:** White to off-white crystals

**Assay:** >99 % C3H4N2

**pH of a 5% solution:** 9.5 - 11.0 at 25 deg C

**Residue after Ignition:** 0.1 % maximum

**Iron (Fe):** 0.001 % maximum

**Water (H2O):** 0.2 % maximum

**Melting range:** 89 - 91 °C

**INDIGO CARMINE ACS**

Product# 34001

Synonyms: C.I. 73015

CAS No: 860-22-0

Formula: C_{16}H_{14}N_{2}O_{8}S_{2}Na_{2}

**Appearance:** Purple Powder

**Lambda Max:** 608 nm (in water)

**Visual Transition Interval:** pH 11.5 (blue) to pH 14.0 (yellow)

**Dye Content:** 80 % minimum

**Loss on drying:** 6% maximum

**Sodium Iodide:** 5% (dry bases) maximum

**Arsenic:** 8 ppm maximum

**Lead:** 0.001% maximum

**Sulfur:** 13.0 – 14.0%

**Cadmium:** 1.00 mg/kg maximum

**Heavy metals:** 40.00 mg/kg maximum

**INDIGO CARMINE CERTIFIED**

Product# 34005

Synonyms: C.I. 73015; Acid Blue 74; 5,5'-Indigodisulfonic acid, disodium salt

CAS No: 860-22-0

Formula: C_{16}H_{14}N_{2}O_{8}S_{2}Na_{2}

**Appearance:** Dark blue to purple powder

**Lambda max. (H2O):** 779nm +/- 3nm

**Solubility (1 mg/ml H2O):** Clear Dark Green Solution

**INDOINE BLUE**

Product# 34020

Synonyms: Basic Blue 16; Janus Blue; Indoine Blue R

CAS No.: 4569-88-4

Formula: C_{30}H_{24}ClIN_{2}O

**F.W.:** 506.01

**Appearance:** Brown crystalline powder

**Solubility (0.1% Methanol):** Clear blue solution

**Loss on drying:** 10% max.

**Lambda max.:** 598nm in methanol

**IODINE INDICATOR**

Product# 34024

Synonyms: Vitex Indicator, Iodimetric Indicator

**F.W.:** 466.35

**Appearance:** Dark blue to purple powder

**Dye content (dried basis):** 80.0% minimum

**Loss on drying:** 5.0% maximum

**Visual Transition Interval:** From pH 11.5 (Blue) To pH 14.0 yellow

**Aqueous solubility:** 1 g in 100 ml at 25 Deg. C

**Subsidiary dyes, excluding sodium 3,3-dioxo 2,2'-bi-indolylidine-5,7'-disulfonate:**

**Dye intermediates:** 0.50% maximum

**Arsenic:** 8 ppm maximum

**Lead:** 0.001% maximum

**Sulfur:** 13.0 – 14.0%

**Cadmium:** 1.00 mg/kg maximum

**Heavy metals:** 40.00 mg/kg maximum

**INDOCYANINE GREEN**

Product# 34015

Synonyms: Cardio Green; 1H-Benzenedolium,, 2-7-1, 3-dihydro-1, 1-dimethyl-3-(4-sulfobutyl)

CAS No.: 3599-32-4

Formula: C_{43}H_{48}N_{2}O_{6}S_{2}

**F.W.:** 774.98

**Appearance:** Dark Green to Brown to Black crystalline powder

**Identification:** To conform to standard

**Assay(Calculated on dry bases):** 94% minimum 100% maximum

**Loss on drying:** 6% maximum

**Sodium Iodide:** 5% (dry bases) maximum

**Arsenic:** 8 ppm maximum

**Lead:** 0.001% maximum

**Sulfur:** 13.0 – 14.0%

**Cadmium:** 1.00 mg/kg maximum

**Heavy metals:** 40.00 mg/kg maximum

**IODINE INDICATOR**

Product# 34024

Synonyms: Vitex Indicator, Iodimetric Indicator

**F.W.:** 466.35

**Appearance:** Dark blue to purple powder

**Dye content (dried basis):** 80.0% minimum

**Loss on drying:** 5.0% maximum

**Visual Transition Interval:** From pH 11.5 (Blue) To pH 14.0 yellow

**Aqueous solubility:** 1 g in 100 ml at 25 Deg. C

**Subsidiary dyes, excluding sodium 3,3-dioxo 2,2'-bi-indolylidine-5,7'-disulfonate:**

**Dye intermediates:** 0.50% maximum

**Arsenic:** 8 ppm maximum

**Lead:** 0.001% maximum

**Sulfur:** 13.0 – 14.0%

**Cadmium:** 1.00 mg/kg maximum

**Heavy metals:** 40.00 mg/kg maximum

**IODINE INDICATOR**

Product# 34024

Synonyms: Vitex Indicator, Iodimetric Indicator

**F.W.:** 466.35

**Appearance:** Dark blue to purple powder

**Dye content (dried basis):** 80.0% minimum

**Loss on drying:** 5.0% maximum

**Visual Transition Interval:** From pH 11.5 (Blue) To pH 14.0 yellow

**Aqueous solubility:** 1 g in 100 ml at 25 Deg. C

**Subsidiary dyes, excluding sodium 3,3-dioxo 2,2'-bi-indolylidine-5,7'-disulfonate:**

**Dye intermediates:** 0.50% maximum

**Arsenic:** 8 ppm maximum

**Lead:** 0.001% maximum

**Sulfur:** 13.0 – 14.0%

**Cadmium:** 1.00 mg/kg maximum

**Heavy metals:** 40.00 mg/kg maximum

**INDOCYANINE GREEN**

Product# 34015

Synonyms: Cardio Green; 1H-Benzenedolium,, 2-7-1, 3-dihydro-1, 1-dimethyl-3-(4-sulfobutyl)

CAS No.: 3599-32-4

Formula: C_{43}H_{48}N_{2}O_{6}S_{2}

**F.W.:** 774.98

**Appearance:** Dark Green to Brown to Black crystalline powder

**Identification:** To conform to standard

**Assay(Calculated on dry bases):** 94% minimum 100% maximum

**Loss on drying:** 6% maximum

**Sodium Iodide:** 5% (dry bases) maximum

**Arsenic:** 8 ppm maximum

**Lead:** 0.001% maximum

**Sulfur:** 13.0 – 14.0%

**Cadmium:** 1.00 mg/kg maximum

**Heavy metals:** 40.00 mg/kg maximum

**IODINE INDICATOR**

Product# 34024

Synonyms: Vitex Indicator, Iodimetric Indicator

**F.W.:** 466.35

**Appearance:** Dark blue to purple powder

**Dye content (dried basis):** 80.0% minimum

**Loss on drying:** 5.0% maximum

**Visual Transition Interval:** From pH 11.5 (Blue) To pH 14.0 yellow

**Aqueous solubility:** 1 g in 100 ml at 25 Deg. C

**Subsidiary dyes, excluding sodium 3,3-dioxo 2,2'-bi-indolylidine-5,7'-disulfonate:**

**Dye intermediates:** 0.50% maximum

**Arsenic:** 8 ppm maximum

**Lead:** 0.001% maximum

**Sulfur:** 13.0 – 14.0%

**Cadmium:** 1.00 mg/kg maximum

**Heavy metals:** 40.00 mg/kg maximum
CAS No.: 9005-84-9  
Formula: C₆H₁₀O₅  
F.W.: 162.067  
Appearance: White odorless powder  
Solubility: Readily soluble in cold water  
Sensitivity 0.05 ml. 0.01% N Iodine: Distinct blue color in 100 ml neutral solution

**INDOLE-3-ACETIC ACID**  
Product# 34027

Synonyms: Heteroauxin; 3-Indoleacetic acid; Acetic acid, Indolyl  
CAS No: 87-51-4  
Formula: C₁₀H₉NO₂  
F.W.: 175.18  
Appearance: White to off-white to Light Tan color Crystalline Powder  
Assay (HPLC): > 98 %  
Melting Point: 166 - 169 deg. C  
Residue after Ignition: < 0.1%  
Loss on drying: < 0.5%

**INDOLE-3-BUTYRIC ACID**  
Product# 34031

Synonyms: 4-(3-1H-Indolyl) butyric acid  
CAS No: 133-32-4  
Formula: C₁₂H₁₃NO₂  
F.W.: 203.24  
Appearance: Beige to Rose fine crystalline Powder  
Assay: 98 % minimum  
Water (K.F.): < 0.5 %  
Heavy Metals (as Pb): < 10 ppm  
Sulfated ash: < 0.1 %  
Melting Point: 120 - 125 deg. C

**INDOLE-3-CARBOXALDEHYDE ACID**  
Product# 34034

Synonyms: Indolyl-3-Aldehyde  
CAS No: 487-89-8  
Formula: C₆H₇NO₂  
F.W.: 145.16  
Appearance: Off White to Light Brown Powder  
Assay: 99 % minimum  
Identification: Positive  
Melting Range: 196 - 198 deg. C

**INDOLE-3-CARBOXALDEHYDE ACID**  
Product# 34034

Synonyms: Indolyl-3-Aldehyde  
CAS No: 487-89-8  
Formula: C₆H₇NO₂  
F.W.: 145.16  
Appearance: Off White to Light Brown Powder  
Assay: 99 % minimum  
Identification: Positive  
Melting Range: 196 - 198 deg. C

**INDOLE-3-CARBOXALDEHYDE ACID**  
Product# 34034

Synonyms: Indolyl-3-Aldehyde  
CAS No: 487-89-8  
Formula: C₆H₇NO₂  
F.W.: 145.16  
Appearance: Off White to Light Brown Powder  
Assay: 99 % minimum  
Identification: Positive  
Melting Range: 196 - 198 deg. C

**INDOLE-3-CARBOXALDEHYDE ACID**  
Product# 34034

Synonyms: Indolyl-3-Aldehyde  
CAS No: 487-89-8  
Formula: C₆H₇NO₂  
F.W.: 145.16  
Appearance: Off White to Light Brown Powder  
Assay: 99 % minimum  
Identification: Positive  
Melting Range: 196 - 198 deg. C
Solubility: Insoluble in water; slightly soluble in 96% ethanol; freely soluble in acetone and ether.
Appearance of Solution: Solutions in ether/acetone are not more than slightly turbid and free from extraneous matter.
Coloring matter, acids and alkalies: To Pass Tests

**p-IODONITROTETRAZOLIUM VIOLET (INT)**

Product# 35198

Synonyms: INT; 2-(4-Iodophenyl)-3-(4-nitrophenyl)-5-phenyltetrazolium chloride
CAS No.: 146-68-9
Formula: C_{19}H_{13}ClIN_{5}O_{2}

F.W.: 505.70

Appearance: Off-white to light yellow crystalline powder
Assay: 99.0% minimum
Identification (IR): Conforms to structure
UV-Vis (water): Lambda max. 248 ± 3nm
Solubility (4mg/ML, H2O): Clear (Yellow to Yellow-Green)

**JANUS GREEN B PASTE**

Product# 40446

Synonyms: C.I. 11050
CAS No: 2869-83-2

Appearance: Very dark green to almost black paste
Dye content: > 33%
Absorptivity 1%, 1cm, at Lambda max. 667.0nm: > 300
Solids by weight, %: 48% min. / 52% max.
Solubility 0.1%(50% EtOH): Clear, greenish-blue solution

**JANUS GREEN B CERTIFIED**

Product# 40450

Synonyms: C.I. 11050
CAS No: 2869-83-2
Formula: C_{30}H_{31}ClN_{6}

F.W.: 511.07

Appearance: Very dark purple /very dark green almost black powder
Dye content: > 50%
Lambda max. (in 50% ethanol): 660 nm
Solubility: Soluble in water, slightly soluble in alcohol

**JENNER STAIN CERTIFIED**

Product# 40500

Synonyms: Eosin-Methylene Blue
CAS No.: 62851-42-7

Appearance: Dark Green powder
Solubility (1mg/ml, MEOH): Opaque, dark blue solution
IR Spectrum: Conforms to structure

**KOJIC ACID, 99%**

Product# 42020

Synonyms: 2-Hydroxymethyl-5-hydroxy-y-pyrone 5-Hydroxy-2-hydroxymethyl-4H-4-pyrone

CAS No: 501-30-4

Appearance: White to beige-brown crystalline powder
Infrared spectrometry: Authentic
Melting point: 151°C to 156°C
Assay Acid: >=98.5 %

**LACMOID**

Product# 44100

Synonyms: Fluorescent Blue
CAS No.: 33869-21-5

Appearance: Black powder
Lambda max.: 611nm in methanol
Solubility (1 mg/ml MEOH): Opaque, dark blue solution
Visual transition interval: From pH 4.4 (red) To pH 6.4 (blue)

**LEAD ACETATE TRIHYDRATE ACS**

Product# 46100

Synonyms: Acetic acid, lead (+2) salt trihydrate
CAS No.: 6080-56-4
Formula: (CH_{3}COO)_{2}Pb_{3}H_{2}O

F.W.: 379.3

Appearance: White crystals
Assay: 99.0 - 103.0%
Insoluble Matter: 0.01% maximum
Chloride (Cl): 5 ppm maximum
Nitrate & Nitrite (as NO3): 0.005% maximum
Calcium (Ca): 0.005% maximum
Copper (Cu): 0.002% maximum
Iron (Fe): 0.001% maximum
Potassium (K): 0.005% maximum
Sodium (Na): 0.01% maximum

**LEAD CARBONATE ACS**

Product# 46120

Synonyms: Basic white lead; Lead subcarbonate; Pigment white; Bis[carbonato(2-)] dihydroxytrilead

CAS No: 598-63-0

Formula: PbCO$_3$

F.W.: 267.20

Appearance: White to off-white powder

Assay: 98.0% minimum

Insoluble in dilute acetic acid: 0.02 % maximum

Chloride (Cl): 0.002 % maximum

Nitrate and nitrite (as NO$_3$): To Pass test

Cadmium (Cd): 0.002 % maximum

Calcium (Ca): 0.01 % maximum

Iron (Fe): 0.005 % maximum

Potassium (K): 0.02 % maximum

Sodium (Na): 0.05 % maximum

Zinc (Zn): 0.003 % maximum

**LEAD CHLORIDE ACS**

Product# 46140

Synonyms: Lead (II) chloride; Lead Dichloride; Plumbous chloride

CAS No: 7758-95-4

Formula: PbCl$_2$

F.W.: 278.10

Appearance: White to Off-White Powder and/or Chunks

Assay (Titration): 97.5 – 102.5 %

Insoluble Matter: 0.005% maximum

Nitrate (NO$_3$): 0.005% maximum

**LEAD NITRATE ACS**

Product# 46160

Synonyms: Lead (II) Nitrate (1:1); Lead dinitrate; Nitric Acid, lead (2+)

CAS No: 10099-74-8

Formula: Pb(NO$_3$)$_2$

F.W.: 331.20

Appearance: White crystalline powder

Assay: ~ 99 %

Chloride (Cl): 0.001 % maximum

Iron (Fe): 0.001 % maximum

**LEAD SULFATE**

Product# 46170

Synonyms: Lead II Sulfate

CAS No: 7446-14-2

Formula: PbSO$_4$

F.W.: 303.25

Appearance: White faintly beige crystals and/or powder, odorless

Assay: 98% Minimum

Solubility: Soluble in about 2225 parts water, Slightly soluble in hot water. Insoluble In alcohol. Soluble in sodium hydroxide solution And concentrated hydriodic acid.

Iron (Fe): <0.001%

Copper (Cu): <0.005%

Chloride (Cl): <0.002%

Nitrate (NO$_3$): <0.005 %

**LEISHMAN STAIN**

Product# 46191

Synonyms: Eosin Methylene Blue Acc. To Leishman; Eosin-polychrome methylene blue

CAS No: 12627-53-1
LEUCO CRYSTAL VIOLET  
Product# 46200  

Synonyms: 4,4,4-Methyidynetris(N,N-dimethylaniline)  
CAS No: 603-48-5  
Formula: C_{25}H_{31}N_{3}  
Appearance: White to light grey to very pale Lavender crystal powder  
Assay: 98 % minimum  
Lambda Max: 261 nm in 0.1 N Hydrochloric acid in Methanol  
Melting Point: 175 - 180 deg. C

LIGHT GREEN S.F. (Yellowish) CERTIFIED C.I. 42095  
Product# 46211  

Synonyms: Acid Brilliant Green 5; Acid Green 5; FD&C Green Number 2; Food Green 2; Pencil Green SF  
CAS No: 5141-20-8  
Formula: C_{37}H_{34}N_{2}O_{9}S_{3}Na_{2}  
Appearance: Deep Purple Powder  
Lambda Max: 630 (422) nm (in Water)  
Melting Point: 288 deg. C  
Dye Content: 85 % minimum

LISSAMINE GREEN B  
Product# 46217  

Synonyms: C.I. 44090; Acid Green 50; Wool Green S  
CAS No: 3087-16-9  
Formula: C_{27}H_{35}N_{3}NaO_{5}S_{2}  
Appearance: Beige to yellowish powder  
Assay (titration): ~98 %  
T.L.C.: Monospot  
2% solution in N NaOH: Clear yellow solution  
Infrared Spectrum: Conforms to structure and standard  
Luminescence Test: Positive  
Sulfated Ash: 2% maximum

Appearance: Dark-greenish black powder  
Solubility: To be soluble in water  
Wavelength of maximum absorption lambda max: 515-530 nm Red  643-658 nm Blue  (2/3 Ethanol 1/3 Water)  
Staining ability: To be acceptable as a Biological Stain.

LITHIUM DODECYL SULFATE  
Product# 46220  

Synonyms: Lithium Lauryl Sulfate; Sulfuric Acid Monododecyl Ester  
CAS No: 2044-56-6  
Formula: C_{12}H_{25}LiO_{4}S  
Appearance: Fine White powder or flakes  
Identification: To pass test  
Assay (C12): 98.5% minimum  
Loss on drying: 0.5 maximum  
Chloride (Cl): 100 ppm maximum  
Heavy Metals: 1 ppm maximum  
Solubility: 3% aqueous: Clear and colorless  
1% Ethanol: Clear and colorless  
U.V. (3% aq. solution): 260 nm <0.100 A.U.  
280 nm <0.075 A.U.

LITMUS  
Product# 46252  

Synonyms: Tournesol  
CAS No.: 1393-92-6  
Appearance: Dark purple to black powder or granules  
Lambda max: 575nm in water  
Solubility(10 mg/ml, H2O): Opaque dark blue solution  
Visual Transition Interval: From pH 4.8 (red) To pH 8.3 (blue)

LUMINOL (3-AMINOPHTHALHYDRAZIDE)  
Product# 46308  

Synonyms: Luminol  
CAS No: 521-31-3  
Formula: C_{8}H_{7}N_{3}O_{2}  
Appearance: Beige to yellowish powder  
Assay (titration): ~98 %  
Infrared Spectrum: Conforms to Structure and Standard  
UV-Visible Spectrum: C = 0.005 G/L in H2O  
E(633 +/- 3NM) = 60,000 (minimum)  
Solubility: 0.1% in H2O; Clear to Very Hazy, Dark Blue to Dark Green Solution
LUMINOL SODIUM SALT HEMIHYDRATE  Product# 46316

Synonyms: Luminol Sodium Salt Hemihydrate
(3-AMINOPHTHALHYDRAZIDE SODIUM SALT HEMIHYDRATE)
CAS No:  206658-90-4
Formula:  C₈H₆N₃NaO₂ F.W.: 199.15

Appearance: Off-white to Tan crystalline powder
Assay:  98 % to 102 %
T.L.C.:  To conform to standard
Solubility (5% in water): Clear, yellow solution
Infrared Spectrum: Conforms to structure and standard
Water Content: 10% maximum

LUMINOL SODIUM SALT HEMIHYDRATE  Product# 46316

Synonyms: Luminol Sodium Salt Hemihydrate
(3-AMINOPHTHALHYDRAZIDE SODIUM SALT HEMIHYDRATE)
CAS No:  206658-90-4
Formula:  C₈H₆N₃NaO₂ F.W.: 199.15

Appearance: Off-white to Tan crystalline powder
Assay:  98 % to 102 %
T.L.C.:  To conform to standard
Solubility (5% in water): Clear, yellow solution
Infrared Spectrum: Conforms to structure and standard
Water Content: 10% maximum

LUXOL FAST BLUE MBSN  Product# 46357

Synonyms: Solvent Blue 38, Direct Blue 86, C.I. 74180
CAS No:  1328-51-4
Formula:  C₃₂H₁₂Cu₈N₈Na₂O₆S₂ F.W.: 778.15

Appearance: Dark blue powder
Identification (I.R.): Conforms to structure
Lambda max (5 mg/l in methanol): 666 nm
Chloride (Cl): 0.1% maximum
Solubility (4 mg plus 4 ml of CH₃OH): Dark blue solution

MAGNESIUM NITRATE ACS  Product# 49130

Synonyms: Magnesium nitrate 6 hydrate; Magnesium (II) nitrate, hexahydrate; Nitric acid, magnesium salt hexahydrate
CAS No:  13446-18-9
Formula:  Mg(NO₃)₂ * 6H₂O

Appearance: White powder
Assay:  85-95% minimum
pH (1.89% aqueous solution): > 7.5
Alkalinity: < 0.1%
Loss on Drying: < 15%
Heavy metals (as Pb): < 20 ppm
Sulfate (SO₄): < 1%
Chloride (Cl): < 1%
Solution (5% hot): Clear
Unsulfated alcohols: < 5%

MAGNESIUM DODECYL SULFATE  Product# 49111

Synonyms: Magnesium Lauryl Sulfate
CAS No:  3097-08-3
Formula:  C₂₄H₅₀O₈S₂Mg F.W.: 551.1

Appearance: White powder
Assay:  85-95% minimum
pH (1.89% aqueous solution): > 7.5
Alkalinity: < 0.1%
Loss on Drying: < 15%
Heavy metals (as Pb): < 20 ppm
Sulfate (SO₄): < 1%
Chloride (Cl): < 1%
Solution (5% hot): Clear
Unsulfated alcohols: < 5%

MAGNESIUM ACETATE TETRAHYDRATE ACS  Product# 49090

Synonyms: Acetic Acid magnesium salt
CAS No:  16674-78-5
Formula:  (CH₃COO)₂Mg · 4H₂O F.W.: 214.46

Appearance: White crystals
Assay:  98.0 % - 102.0%
Insoluble Matter: 0.005% maximum
Chloride (Cl): 0.001% maximum
Nitrogen Compounds (as N): 0.001% maximum
Sulfate (SO₄): 0.005% maximum
Barium (Ba): 0.001% maximum
Calcium (Ca): 0.01% maximum
Manganese (Mn): 0.001% maximum
Potassium (K): 0.005% maximum
Sodium (Na): 0.005% maximum
Strontium (Sr): 0.005% maximum
Heavy metals (as Pb): 5 ppm maximum

MAGNESIUM CHLORIDE 6HYDRATE ACS  Product# 49104

Synonyms: Magnesium chloride, hexahydrate; Magnesium chloride 6 hydrate, crystal
CAS No:  7791-18-6
Formula:  MgCl₂ * 6H₂O F.W.: 203.30

Appearance: Colorless to white, moist crystals
Assay:  99.0 – 102.0%
Insoluble Matter: 0.005% maximum
Nitrate (NO₃): 0.001% maximum
Phosphate (PO₄): 5 ppm maximum
Sulfate (SO₄): 0.002% maximum
Ammonium (NH₄): 0.002% maximum
Barium (Ba): 0.005% maximum
Calcium (Ca): 0.01% maximum
Manganese (Mn): 5 ppm maximum
Potassium (K): 0.005% maximum
Sodium (Na): 0.005% maximum
Iron (Fe): 5 ppm maximum

MAGNESIUM CHLORIDE 6HYDRATE ACS  Product# 49104

Synonyms: Magnesium chloride, hexahydrate; Magnesium chloride 6 hydrate, crystal
CAS No:  7791-18-6
Formula:  MgCl₂ * 6H₂O F.W.: 203.30

Appearance: Colorless to white, moist crystals
Assay:  99.0 – 102.0%
Insoluble Matter: 0.005% maximum
Nitrate (NO₃): 0.001% maximum
Phosphate (PO₄): 5 ppm maximum
Sulfate (SO₄): 0.002% maximum
Ammonium (NH₄): 0.002% maximum
Barium (Ba): 0.005% maximum
Calcium (Ca): 0.01% maximum
Manganese (Mn): 5 ppm maximum
Potassium (K): 0.005% maximum
Sodium (Na): 0.005% maximum
Iron (Fe): 5 ppm maximum
**MAGNESIUM SULFATE 7 HY ACS**

Product# 49137

Synonyms: Epsom Salts
CAS No: 10034-99-8
Formula: MgSO₄·7H₂O

F.W.: 246.67

Appearance: White Crystalline Powder
Assay: 98.0-102%
pH of a 5% solution at 25˚C: 5.0-8.2
Insolubility matter: 0.005% maximum
Chloride (Cl): 5 ppm maximum
Nitrate (NO₃): 0.002% maximum
Ammonium (NH₄): 0.002% maximum
Calcium (Ca): 0.02% maximum
Manganese (Mn): 5 ppm maximum
Potassium (K): 0.005% maximum
Sodium (Na): 0.005% maximum
Strontium (Sr): 0.005% maximum
Heavy metals (as Pb): 5 ppm maximum
Iron (Fe): 5 ppm maximum

**MALACHITE GREEN C.I. 42000**

Product# 49159

Synonyms: Solvent Green I; C.I. 42000:1; Benzenemethanol
CAS No: 569-64-2
Formula: C₂₃H₂₆N₂O - HCl

F.W.: 364.90

Appearance: Blue-Green Powder
Assay: 90.0 % minimum
Infrared Spectrum: Conforms to Structure
UV-Visible Spectrum: C = 0.01 G/L in H₂O

E(618 +/- 2NM) => 59,000
Solubility: 0.1% in H₂O; Opaque, Dark Blue Solution
Loss on Drying: 6%

**MALACHITE GREEN OXALATE CERTIFIED**

Product# 49161

Synonyms: Acryl Brilliant Green; Aniline Green; China Green; Fast Green; Victoria Green; Basic Green 4; C.I. 42000
CAS No.: 2437-29-8
Formula: C₄₆H₅₀N₄·2HC₂O₄·C₂H₂O₄

F.W.: 927.03

Appearance: Dark green crystalline powder
Assay: Minimum 90%
pH (10 gr / l water): 2 ± 1
Water Insolubles: Max. 0.5%
Lambda max.: 614(425)nm in water
Solubility 0.01% aqueous solution: Dark green solution
Visual Transition Interval: From pH 0.0 (yellow) To pH 2.0 (green) And From pH 11.6 (blue-green) To pH 14.0 (colorless)

**MANGANESE (II) CHLORIDE ACS**

Product# 49260

Synonyms: Manganese Chloride 4H₂O
CAS No.: 13446-34-9
Formula: MnCl₂·4H₂O

F.W.: 197.91

Appearance: Pink crystals
Melting Point: 58 °C
Assay: 98.0 - 101.0%
pH of a 5% solution: 3.5-6.0 @ 25 °C
<table>
<thead>
<tr>
<th>Product#</th>
<th>MANGANESE (II) SULFATE MONOHYDRATE ACS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms:</td>
<td>Manganese sulfate, monohydrate; Manganous sulfate monohydrate</td>
</tr>
<tr>
<td>CAS No.:</td>
<td>10034-96-5</td>
</tr>
<tr>
<td>Formula:</td>
<td>MnSO₄·H₂O</td>
</tr>
<tr>
<td>F.W.:</td>
<td>169.02</td>
</tr>
<tr>
<td>Appearance:</td>
<td>Off-White to pink powder</td>
</tr>
<tr>
<td>Assay:</td>
<td>98.0-101.0%</td>
</tr>
<tr>
<td>Loss on Ignition:</td>
<td>10.0-12.0%</td>
</tr>
<tr>
<td>Substances reducing KMNO₄:</td>
<td>To Pass Test</td>
</tr>
<tr>
<td>Insoluble Matter:</td>
<td>0.01% maximum</td>
</tr>
<tr>
<td>Chloride (Cl):</td>
<td>0.005% maximum</td>
</tr>
<tr>
<td>Calcium (Ca):</td>
<td>0.005% maximum</td>
</tr>
<tr>
<td>Magnesium (Mg):</td>
<td>0.005% maximum</td>
</tr>
<tr>
<td>Nickel (Ni):</td>
<td>0.02% maximum</td>
</tr>
<tr>
<td>Potassium (K):</td>
<td>0.01% maximum</td>
</tr>
<tr>
<td>Sodium (Na):</td>
<td>0.05% maximum</td>
</tr>
<tr>
<td>Zinc (Zn):</td>
<td>0.005% maximum</td>
</tr>
<tr>
<td>Heavy metals (as Pb):</td>
<td>0.002% maximum</td>
</tr>
<tr>
<td>Iron (Fe):</td>
<td>0.002% maximum</td>
</tr>
</tbody>
</table>

**MELDOLA'S BLUE**

Product# 50020

- Synonyms: Basic Blue 6; C.I. 51175; Fast Blue 3R; 8-Dimethylamino-2,3-Benzophenoxazine Hemi(Zinc Chloride) Salt
- CAS No.: 7057-57-0
- Formula: C₁₈H₁₅ClN₂O₆·½ZnCl₂
- F.W.: 378.93

**MERCURIC ACETATE ACS**

Product# 50120

- Synonyms: Mercury acetate; Mercuric diacetate; Acetic Acid, Mercury (2+) salt
- CAS No.: 1600-27-7
- Formula: (CH₃COO)₂Hg
- F.W.: 318.68

**MERCURIC BROMIDE ACS**

Product# 50123

- Synonyms: Mercury (II) Bromide
- CAS No.: 7789-47-1
- Formula: HgBr₂

---

**DUDLEY CHEMICAL**
DUDLEY CHEMICAL

**MERCURIC CHLORIDE ACS**

Product# 50131

Synonyms: Calochlor; Corrosive mercury chloride; Corrosive Sublimate; Mercury bichloride; Mercury perchloride

CAS No: 7487-94-7

Formula: HgCl₂

![Cl] + HgCl₂

F.W.: 271.50

Appearance: White crystalline powder

Assay: > 99.5%

Solution in ethyl ether: To Pass Test

Residue after reduction: 0.02 % maximum

Iron (Fe): 0.002 % maximum

Solubility: Soluble in water, alcohol and ether

**MERCUROUS MERCURY (as Hg):**

0.05 % maximum

**CHLORIDE (Cl):**

0.25 % maximum

**MERCURIC IODIDE (RED) ACS**

Product# 50150

Synonyms: Mercuric Iodide; Mercury Diodide; Mercury (II) Iodide

CAS No: 7774-29-0

Formula: HgI₂

![I₂] + HgI₂

F.W.: 454.40

Appearance: Red powder

Assay (dried basis): > 99.0%

Solubility in Potassium Iodide solution: To Pass Test

Loss on drying: 1.0% maximum

Mercurous Mercury (as Hg): 0.1 % maximum

Soluble mercury salts (as Hg): 0.05 % maximum

**MERCUROUS MERCURY (as Hg):**

0.2 % maximum

**CHLORIDE (Cl):**

0.002 % maximum

**MERCURIC NITRATE MONOHYDRATE ACS**

Product# 50161

Synonyms: Nitric Acid Mercury Salt Monohydrate; Mercuric Nitrate Monohydrate

CAS No.: 7783-34-8

Formula: Hg(NO₃)₂ · H₂O

![Hg(NO₃)₂ · H₂O]

F.W.: 342.62

Assay: > 98.0%

Residue after ignition: 0.01 % maximum

Chloride (Cl): 0.002 % maximum

Sulfate (SO₄): 0.002 % maximum

**MERCUROUS MERCURY (as Hg):**

0.001 % maximum

**CHLORIDE (Cl):**

0.2 % maximum

**MERCURIC OXIDE RED ACS**

Product# 50164

Synonyms: Mercury (II) Oxide

CAS No: 21908-53-2

Formula: HgO

![HgO]

F.W.: 216.59

Appearance: Red-orange amorphous powder

Solubility: Insoluble in water, soluble in Nitric and Hydrochloric acid

Assay (HgO): > 99 %

Insol. in dilute hydrochloric acid: 0.03 % maximum

Residue after reduction: 0.025 % maximum

Chloride (Cl): 0.025 % maximum

Sulfate (SO₄): 0.015 % maximum

Iron (Fe): 0.005 % maximum

**MERCUROUS MERCURY (as Hg):**

0.1 % maximum

**CHLORIDE (Cl):**

0.025 % maximum

**SULFATE (SO₄):**

0.01 % maximum

**NITROGEN COMPOUNDS (as N):**

0.005 % maximum

**IRON (Fe):**

0.005 % maximum

**MERCURIC OXIDE YELLOW ACS**

Product# 50167

Synonyms: Mercury (II) Oxide; Mercuric Oxide Red; Mercuric Oxide Yellow

CAS No: 21908-53-2

Formula: HgO

![HgO]

F.W.: 216.59

Appearance: Yellow-orange to orange powder

Identification: Positive

Solubility: Insoluble in water, soluble in Nitric and Hydrochloric acid

Assay (HgO): > 99.0%

Insoluble in dilute hydrochloric acid: 0.030 % maximum

Residue after reduction: 0.050 % maximum

Chloride (Cl): 0.025 % maximum

Sulfate (SO₄): 0.01 % maximum

Nitrogen compounds (as N): 0.005 % maximum

Iron (Fe): 0.003 % maximum

**MERCUROUS MERCURY (as Hg):**

0.001 % maximum

**CHLORIDE (Cl):**

0.2 % maximum

**MERCURIC SULFATE ACS**

Product# 50170

Synonyms: Mercury (II) Sulfate (1:1); Mercury bisulfate; Sulfuric Acid Mercury (2+) salt (1:)

CAS No.: 7783-35-9

Formula: HgSO₄

![HgSO₄]

F.W.: 296.65

Appearance: White crystals

Identification: Positive

Assay: 98.0 % minimum

Iron (Fe): 0.005 % minimum
Residue on Reduction:  0.02 % maximum  
Chloride (Cl):  0.003 % maximum  
Nitrate (NO3):  To Pass Test  
Mercurous mercury (as Hg):  0.15 % maximum

**MERCURIC THIOCYANATE**  
Product# 50190

Synonyms: Mercury (II) Thiocyanate; Mercuric Sulfocyanate  
CAS No:  592-85-8  
Formula: Hg(CNS)_2  
F.W.: 316.75

Appearance: White to white with a faint yellow cast powder,  
decomposes without melting, burns with a bluish flame.  
Assay:  99.0 – 105.0 %  
Assay (Hg):  61.7% to 64.9%  
Solubility: Soluble in Hydrochloric acid, methanol; Insoluble in water.  
Sodium (Na):  < 0.01 %  
Iron (Fe):  < 0.002%  
Chloride sensitivity:  To Pass Test  
Melting Point:  165 Deg. C (dec.)  
Residue after Ignition:  < 0.05%

**MERCURIC CHLORIDE ACS**  
Product# 50196

Synonyms: Dimercury Dichloride; Mercurous Chloride; Mercury  
Subchloride; Mercury (I) Chloride  
CAS No:  10112-91-1  
Formula: Hg_2Cl_2  
F.W.: 472.09

Assay:  > 99.5 % Hg2Cl2  
Residue after reduction:  0.02 % maximum  
Mercuric chloride:  0.01 % maximum  
Sulfate:  0.01 % maximum

**MERCURIOUS NITRATE DIHYDRATE ACS**  
Product# 50200

Synonyms: Mercurous Nitrate; Dihydrate; Nitric Acid, mercury (1+)  
salt, dihydrate; Mercury protonitrate; Mercury (I) Nitrate, dihydrate  
CAS No.:  14836-60-3  
Formula: Hg(NO_3)_2 * 2H_2O  
F.W.: 561.22

Appearance: White to yellow crystalline powder  
Assay:  ≥ 97.0 %  
Insoluble Matter:  0.005 % maximum  
Residue after reduction:  0.01 % maximum  
Chloride (Cl):  0.005 % maximum  
Sulfate (SO4):  0.005 % maximum  
Iron (Fe):  0.001 % maximum

**DUDLEY CHEMICAL**

Mercuric mercury (as Hg):  0.5 % maximum

**METALPHTHALEIN ACS**  
Product# 50202

Synonyms: Phthalein Purple; O-Cresolphthalein Complexone ACS;  
Xylenylphthalein-bisiminodiacetic acid  
CAS No.:  2411-89-4  
Formula: C_{32}H_{32}N_2O_{12}  
F.W.: 636.60

Appearance: White to light pink to tan crystalline powder  
Identification: Conforms to structure and standard  
Residue on ignition:  0.5% maximum  
Loss on drying:  10.0% maximum  
Lambda Max:  575(377)nm in 0.1 N sodium hydroxide  
Clarity of solution:  To pass test  
Suitability as a mixed indicator for complexometry: To pass test

**METANIL YELLOW**  
Product# 50206

Synonyms: C.I. 13065; Acid Yellow 36  
CAS No:  587-98-4  
Formula: C_{18}H_{14}N_3O_3SNa  
F.W.: 375.38

Appearance: Reddish yellow powder  
Lambda max:  414 nm in Methanol  
Dye content:  70% minimum  
Solubility0.01 g in 10 ml MEOH: Clear, deep yellow-orange solution  
Visual Transition Interval:  From pH 1.2 (red) To pH 2.3 (yellow)

**3-METHOXY-4-METHYLBENZOIC ACID**  
Product# 50208

Synonyms: 3-Methoxy-p-toluic acid; 4-Methyl-m-anisic acid  
CAS No:  7151-68-0  
Formula: C_{9}H_{10}O_{3}  
F.W.: 166.2

Appearance: White Powder  
Assay:  98% minimum  
Melting Point:  152-154 Deg. C (lit.)

**5-METHOXYINDOLE**  
Product# 50212

Synonyms: Methoxy-5 Indole (French); 5-Methoxyindole  
CAS No.:  1006-94-6  
Formula: C_{9}H_{9}NO  
F.W.: 147.18
Appearance: White to off-white crystalline powder
Identification: Conforms to standard
Infrared Spectrum: Conforms to structure & standard
Assay: 98.0% minimum
Loss on drying @105 °C: 0.5% maximum
Residue on Ignition: 0.5% maximum
Melting Point: 55.5 °C to 58.5 °C
Boiling Point: 176 °C to 178 °C
Solubility: Soluble in ethanol

**3-METHOXYSALICYLIC ACID**  
Product# 50215

Synonyms: 2-Methyladamantane-2-ol
CAS No.: 877-22-5
Formula: \( \text{CH}_3\text{OC}_6\text{H}_3(\text{OH})\text{CO}_2\text{H} \)
F.W.: 168.15
Appearance: White to brown powder
Assay: 97.0 - 103.5% (with NaOH)
Melting Point: 147-152 °C

**4-METHOXYSALICYLIC ACID**  
Product# 50217

Synonyms: 2-Hydroxy-4-Methoxybenzoic Acid
CAS No.: 2237-36-7
Formula: \( \text{CH}_3\text{OC}_6\text{H}_3(\text{OH})\text{CO}_2\text{H} \)
F.W.: 168.15
Appearance: Off-White crystalline powder
Assay (Titration with NaOH): 99.0 minimum
Melting Point: 157°C - 159°C

**5-METHOXYSALICYLIC ACID**  
Product# 50219

Synonyms: 2-Hydroxy-5-methylbenzoic acid þ-Cresotic Acid
CAS No: 89-56-5
Formula: \( \text{CH}_3\text{C}_6\text{H}_3(\text{OH})\text{CO}_2\text{H} \)
F.W. 152.15
Appearance: beige fine crystalline powder
Infrared spectrometry: authentic
Melting point: 142°C to 146°C
Separat. techn. HPLC: >=97.5 %

**6-METHOXYSALICYLIC ACID**  
Product# 50223

Synonyms: 6-Hydroxy-o-anisic Acid
CAS No.: 3147-64-6
F.W.: 168.15
Appearance: White Solid, Powder or Crystals

**2-METHYL-2-ADAMANTANOL**  
Product# 50230

Synonyms: 2-Methyladamantane-2-ol
CAS No.: 702-98-7
Formula: \( \text{C}_11\text{H}_{18}\text{O} \)
F.W.: 166.26
Appearance: White to Off-White crystalline powder
Assay: 98.0 % minimum
Identification: In accordance with Ref. Standard
Melting Range: 208 - 215 deg. C
Sulphated Ash: 0.10 % maximum

**4-(METHYLAMINO)BENZOIC ACID**  
Product# 50236

Synonyms: Benzoic acid, p-(methylamino)-
CAS No: 10541-83-0
Formula: \( \text{C}_8\text{H}_9\text{NO}_2 \)
F.W.: 151.2
Appearance: Off-white Powder
Assay: 97% minimum
Melting Point: 160-163 Deg. C (lit.)

**METHYL BLUE C.I. 42780**  
Product# 50240

Synonyms: Acid Blue 93
CAS No: 28983-56-4
Formula: \( \text{C}_{32}\text{H}_{27}\text{N}_3\text{O}_9\text{S}_3\text{Na}_2 \)
F.W.: 737.74
Appearance: Brownish-Purple crystalline powder With metallic lustre
Solubility (in water): Soluble
Lambda max: 594-610 nm in water

**METHYL CELLULOSE**  
Product# 50245

Synonyms: Methocel MC
CAS No.: 9004-67-5
Formula: 

Phone: 1-732-886-3100   Fax: 1-732-886-3688   Email: dudley@dudley-chem.com
Appearance: White fibrous powder or granules
Identification A, B, C: To pass tests
pH: 5.5-8.0
Loss on drying @ 105 Deg. C for 2 hours: 5.0% maximum
Residue on Ignition: 1.5% maximum
Assay Methoxy content(on dried basis): 27.5% - 31.5%
Viscosity (LV-4, 60 rpm): 3000 – 5600 cp
Heavy metals (as Pb): 10 ppm maximum
Organic Volatile Impurities: To pass test
Solubility: Clear to hazy colorless to light yellow viscous solution at 20 mg/ml in water

METHYLENE BLUE TRIHYDRATE (TECHNICAL) C.I. 52015
Product# 50252

Synonyms: Basic Blue 9, C.I. 52015; trihydrate; Methylene Blue trihydrate; 3,7-Bis(dimethylamine)phenazathionium chloride trihydrate
CAS No: 7220-79-3
Formula: C_{16}H_{18}CIN_3S*3H_2O

F.W.: 373.90
Appearance: Green Powder
Assay: 90 % Minimum
Loss on drying: 8.0 - 18.0 %

METHYLENE BLUE CERTIFIED
Product# 50255

Synonyms: Basic Blue 9; C.I. 52015
CAS No: 7220-79-3
Formula: C_{16}H_{18}CIN_3S*H_2O

F.W.: 373.90
Appearance: Dark greenish crystalline powder
Identification: To pass test
Assay: > 82%
Loss on drying at 105 Deg. C: 8% - 18%
Lambda max.: 661nm in water
Solubility: Soluble in water, ethanol, methyl Cellosolve and ethylene glycol.

METHYLENE BLUE USP C.I. 52015
Product# 50261

Synonyms: Basic Blue 9, C.I. 52015 trihydrate; Methylene Blue trihydrate; 3,7-Bis(dimethylamino)phenazathionium chloride trihydrate
CAS No: 7220-79-3
Formula: C_{16}H_{18}CIN_3S*3H_2O

Appearance: White to off-white to slightly beige powder
Melting Point: 285 deg. C
Lambda Max: 557 nm in Water
Residue on Ignition: < 0.1%
Loss on drying @110°C/1hr: < 0.5%
Heavy metals (as Pb): < 10 ppm

METHYLENE GREEN ZINC CHLORIDE DOUBLE SALTS
Product# 50271

Synonyms: Basic Green 5   C.I. 52020
CAS No.: 6722-15-2
Formula: C_{16}H_{18}CIN_3O_2S

F.W.: 433.0
Appearance: Very dark green or brown powder
Dye content: ~65%
Lambda max.: 657(618)nm in pH 5.8 buffer
Solubility (1 mg/ml, H2O): Opaque, deep blue solution
**METHYL GREEN CERTIFIED C.I. 42585**  Product# 50317

Synonyms: Benzenaminium, 4-4-(dimethylamino)phenyl 4-(dimethyl amino)-2,5 cyclohexadien-1-ylidenemethyl-n-ethyl-n,n-dimethyl-, bromide chloride

CAS No.: 14855-76-6  
Formula: (C_{26}H_{33}Cl_{2}N_{3})_{n}xZnCl_{2}  
F.W.: 516.95

Appearance: Dark green powder  
Loss on drying: Maximum 10%  
Assay: Minimum 75%  
Lambda max.: 632nm (in water)  
Solubility: Soluble in water, slightly soluble in alcohol, practically insoluble in methylene chloride and ether.

Zinc content(calculated on dried basis): Minimum 5% Maximum 7.5%

Color of solution at pH 2.5 to pH 10: Blue-green solution

**METHYL GREEN C.I. 42590**  Product# 50320

Synonyms: C.I. 42590; Ethyl Green  
CAS No:  7114-03-6  
Formula: C_{27}H_{35}Cl_{2}N_{3} x ZnCl_{2}  
F.W.: 653.24

Dye Content (TiCl3 titration) Calculated as the ZnCl2 double salt: > 65%  
Appearance: Dark, Brownish Red to dark green Powder  
Spectroscopy: Lambda max. 630 – 635 nm in water  
Solubility: Soluble in water and to a lesser extent in ethanol to give a clear deep green solution. No solid residue  
Visual Transition Interval: pH 0.2 (yellow) to pH 1.8 (blue)

**METHYL 3-HYDROXYBENZOATE**  Product# 50327

Synonyms: Benzeneacetic acid, 4-Hydroxy-, methyl ester  
CAS No:  19438-10-9  
Formula: C_{8}H_{8}O_{3}  
F.W.: 152.15.17

Appearance: White to off-white to Beige crystalline powder  
Identification: To pass test  
Assay (by HPLC): > 99.0%  
Melting Point: 70 – 72˚ C (158-162˚F)  
Boiling Point: 280 – 281˚ C  
Infrared Spectrum: Conforms to Structure

**METHYL 4-HYDROXYPHENYLACETATE, 99%**  Product# 50329

Synonyms: Benzeneacetic acid, 4-Hydroxy-, methyl ester  
CAS No:  14199-15-6  
Formula: HOOC_{6}H_{4}CO_{2}CH_{3}  
F.W.: 166.17

Appearance: White to off-white crystalline powder  
Identification: To pass test  
Assay (by HPLC): > 99.0%  
Melting Point: 55 – 60 Deg. C  
Boiling Point: 162 – 163 Deg. C (5mm Hg)  
Water: < 0.5%

**5-METHYL-2-NITROBENZOIC ACID**  Product# 50333

Synonyms: 6-Nitro-M-Toluic Acid  
CAS No:  3113-72-2  
F.W.: 181.15

Appearance: White to Yellow Crystals, Needles, Crystalline Powder  
Infrared spectrum: Conforms to Structure  
Purity (Titration by NaOH): 94.0 - 106.0 %  
GC (area %): ≥94.0 %

**METHYL ORANGE ACS**  Product# 50341

Synonyms: C.I. 13025; Acid Orange 52; Orange III; 4-(Dimethylamino)azobenzenesulfonic Acid, Sod. Salt  
CAS No:  547-58-0  
Formula: C_{14}H_{14}N_{3}NaO_{3}S  
F.W.: 327.34

Appearance: Fine Orange powder  
Clarity of Solution: To Pass ACS Test  
Aqueous solubility: Soluble in 500 parts water; More soluble in hot water  
Melting Point: > 300 deg. C  
Loss on drying @110 °C/1hr: < 3%  
Visual Transition Interval: pH 3.2 (pink or red ) to pH 4.4 (yellow)

**METHYL RED FREE ACID ACS**  Product# 50362

Synonyms: 2-[4-(Dimethylamino)phenylazo]benzoic acid; C.I. 13020; Acid Red 2  
CAS No:  493-52-7  
Formula: C_{15}H_{13}N_{2}O_{2}  
F.W.: 261.27

Appearance: Fine Orange powder  
Clarity of Solution: To Pass ACS Test  
Aqueous solubility: Soluble in 500 parts water; More soluble in hot water  
Melting Point: > 300 deg. C  
Loss on drying @110 °C/1hr: < 3%  
Visual Transition Interval: pH 3.2 (pink or red ) to pH 4.4 (yellow)
DUDLEY CHEMICAL

Phone: 1-732-886-3100    Fax: 1-732-886-3688    Email: dudley@dudley-chem.com

METHYL RED HCL ACS

Synonyms: 2-([4-(dimethylamino)phenyl]azo)-benzoic acid, HCL
CAS No: 63451-28-5
Formula: C₁₅H₁₅N₃O₂ · HCl

Clarity of alcohol Solution: Passes test
Visual Transition Interval: From pH 4.2 (pink) To pH 6.2 (yellow)

METHYL RED SODIUM SALT ACS

Synonyms: 2-[4-(Dimethylamino)phenylazo]benzoic acid sodium salt; C. I. 13020; Acid Red 2
CAS No: 845-10-3
Formula: C₁₅H₁₄N₃O₂Na

Clarity of alcohol Solution: Passes test
Clarity of aqueous solution: To Pass Test
Visual Transition Interval: pH 4.2 (pink) to pH 6.2 (yellow)
Loss on drying @110°C /1hr: < 5%

3-METHYLSALICYLIC ACID

Synonyms: 2-Hydroxy-3-methylbenzoic acid; o-Cresotic acid; Cresotinic
CAS No: 83-40-9
Formula: C₇H₈O₃

Identification (I.R.): Conforms to structure and standard
Melting Range: 164 – 167 Deg. C
Assay: 98.5% minimum

4-METHYLSALICYLIC ACID, 99%

Synonyms: 2-Hydroxy-4-methylbenzoic acid; m-Cresotic Acid
CAS No: 50-85-1
Formula: C₇H₆O₃(OH)CO₂H

Clarity of alcohol Solution: Passes test
Clarity of aqueous solution: To Pass Test
Residue on Ignition: 0.1% maximum

4-METHYL-5-THIAZOLECARBOXYLIC ACID, 97%

Synonyms: 4-Methyl-1,3-thiazole-5-carboxylic acid
CAS No: 20485-41-0
Formula: C₅H₅NO₂S

Identification (I.R.): Conforms to structure and standard
Melting Range: 250 – 287 Deg. C
Assay (titration): 97.0% minimum

METHYLTHYMOL BLUE SODIUM SALT ACS

Synonyms: 3,3'-Bis[N,N-di(carboxymethyl)-
aminomethyl]thymolsulphonphthalein, Sodium
CAS No.: 1945-77-3
Formula: C_{37}H_{40}N_{2}O_{13}Na_{4}S
F.W.: 844.74

Appearance: Brown to Dark-Green to black powder
Suitability as a metal indicator: To Pass Test
Clarity of solution: To Pass Test
Visual transition interval: From pH 6.5 (yellow) To pH 8.5 (blue)
Loss on drying @110°C: 10% maximum

**METHYL VIOLET 2B CERTIFIED C.I. 42535**  Product# 50422

Synonyms: C.I. Basic Violet; C.I. 42535; Methyl Violet, Indicator Grade
CAS No: 8004-87-3
Formula: C_{24}H_{26}N_{3}Cl
F.W.: 393.96

Appearance: Green Crystalline Powder
Melting Point: 137 deg. C
Lambda max: 584 nm (in 50% Ethanol)
Visual Transition Interval: pH 0.1 (yellow) to pH 2.7 (pink)

**METRONIDAZOLE USP**  Product# 51100

Synonyms: 2-Methyl-5-nitroimidazole-1-ethanol; 1H-Imidazole-1-ethanol, 2-methyl-5-nitro-.
CAS No: 443-48-1
Formula: C_{6}H_{9}N_{3}O_{3}
F.W.: 171.20

Appearance: White to yellowish crystalline powder
Assay (on anhydrous basis): 99.0% - 101.0%
Identification A, B: To Pass Tests
Melting Point: 159 - 163 deg. C
Residue on ignition: 0.1 % maximum
Loss on drying(at 105 deg. C/ 2 hours): 0.5 % maximum
Heavy Metals: 0.005% maximum
Non-basic substances: To Pass Test
Solubility(200 mg plus 4 ml of Acetic acid): Clear to slightly hazy, light yellow to light green solution.
Chromatographic Purity: To Pass Test

**MUCIC ACID**  Product# 52002

Synonyms: Galactaric acid; Saccharolactic acid; Tetrahydroxydipic acid; Tetrahydroxyhexanedioic acid
CAS No.: 526-99-8
Formula: C_{6}H_{10}O_{8}
F.W.: 210.14

Appearance: White to off-white crystalline powder
Identification: Conforms to structure
Assay: 98% minimum
Melting Point: 210 - 225 Deg. C
Loss on drying: 1.0% maximum
Sulfated Ash: 0.1% maximum
Solubility 4% in 1N NaOH solution: Clear, colorless solution

**MUREXIDE ACS**  Product# 52151

Synonyms: 5,5'Nitrilobarbituric Acid Monoammonium Salt
CAS No: 3051-09-0
Formula: C_{8}H_{8}N_{6}O_{6}
F.W.: 284.19

Appearance: Dark Maroon to Reddish Violet Powder
Identification A,B: To Pass Test

---

Phone: 1-732-886-3100    Fax: 1-732-886-3688    Email: dudley@dudley-chem.com
2-NAPHTHALDEHYDE, 98%

Product# 53251

Synonyms: 2-Formyl naphthalene; 2-Naphthalene carboxaldehyde; beta-Formyl naphthalene, beta-Naphthaldehyde, beta-Naphthylcarboxaldehyde, Naphth-2-aldehyde

CAS No.: 66-99-9

Formula: C_{10}H_{7}CHO

F.W.: 156.18

Appearance: Off-white to tan crystalline powder

Assay (GC): 98% minimum

Melting Point: 57 °C to 62 °C

1-NAPHTHALENE ACETIC ACID

Product# 53340

Synonyms: Naphthalene-2-Acetic Acid

CAS No.: 86-87-3

Formula: C_{12}H_{10}O_2

F.W.: 186.21

Appearance: White to Off-White crystalline powder

Assay: 98.0 % minimum

Melting Point: 129 - 131.5 deg. C

Solubility: To pass test

2-NAPHTHOIC ACID, 99%

Product# 53356

Synonyms: 2-Naphthalene carboxylic Acid

CAS No.: 93-09-4

Formula: C_{11}H_{8}O_2

F.W.: 172.18

Appearance: White to Off-White to Beige Powder

Melting Point: 185° C to 187° C

Assay (by HPLC): 99%

Alpha- NAPHTHOLBENZEIN

Product# 53359

Synonyms: 4,4’-(a-Hydroxybenzylidene)di-1-naphthol; a,a-Bis[4-hydroxy-1-naphthyl]benzyl alcohol p-Naphtholbenzein

CAS No.: 145-50-6

Formula: C_{27}H_{18}O_2

F.W.: 374.43

Appearance: Red-brown flakes/Powder

Specific Extinction (1%/1cm): 350 minimum

Maximum of Absorption (in 0.01M NaOH): 644.0 - 652.0 nm

Visual Transition Interval: From pH 8.2 (orange) To pH 10.0 (blue)

Chloride (Cl): 5000 ppm maximum

NAPHTHOL GREEN B ACS

Product# 53361

Synonyms: Acid Green 1

CAS No.: 19381-50-1

Formula: C_{30}H_{15}FeN_{3}O_{15}S_{3}

F.W.: 878.46

Appearance: Dark Green to Black Powder

Solubility: Dark Green Solution at 4mg + 4ml of water

Dye Content: Approximately 50%

a-NAPHTHOLPHTHALEIN

Product# 53365

Synonyms: Di-p-a-Naphthophthalide

CAS No.: 596-01-0

Formula: C_{28}H_{18}O_4

F.W.: 418.45

Appearance: Dark Pink to Brown Powder

Melting Point: 237 – 240°C

Loss on drying @110°C (1hr): < 5%

Absorptivity 1%/1cm @Lambda max.: >550

Absorption Max. (in 0.1N NaOH): 648 – 654 nm

Visual Transition Interval: From pH 7.3 (pinkish-yellow) To pH 8.7 (greenish-blue)

N-(1-NAPHTHOL)ETHYLENEDIAMINE DIHCL

Product# 53368

Synonyms: 2-(1-Naphthylamino)ethylenediamine dihydrochloride

CAS No.: 1465-25-4

Formula: C_{12}H_{12}N_{2}HCl

F.W.: 259.18

Appearance: White to off-white powder

Melting Point: 194-198 Deg. C

Phone: 1-732-886-3100 Fax: 1-732-886-3688 Email: dudley@dudley-chem.com
NAPHTHORESORCINOL
Product# 53370
Synonyms: 1,3-Dihydroxynaphthalene
CAS No.: 132-86-5
Formula: C_{10}H_{8}O_{2}

F.W.: 160.17

Appearance: White to Tan Powder
Melting Point: 123 °C to 125 °C
Assay (by HPLC): 99% Minimum
Solubility: Clear to slightly hazy colorless to Orange Brown solution at 50mg/ml of Ethanol

1-NAPHTHYLACETONITRILE
Product# 53376
Synonyms: 1-Naphthaleneacetonitrile
CAS No.: 132-75-2
Formula: C_{12}H_{9}N

F.W.: 167.21

Appearance: White to off-white solid
Melting Point: 33 °C to 35 °C
Boiling Point: 191 °C to 194 °C / 18 mm
Flash Point: >230 °F
Assay: 97.0% minimum

NEOCUPROINE ACS
Product# 53501
Synonyms: 2,9-dimethyl-1,10-phenanthroline; 2,9-dimethyl-o-phenanthroline.
CAS No: 484-11-7
Formula: C_{14}H_{12}N_{2}

F.W.: 208.26

Appearance: White to yellow to tan crystalline powder
Identification: Conforms to structure and standard
Melting Point: 159 – 164 Deg. C
Loss on drying: 6.0% maximum
Assay (GC): 98 % minimum
Residue on Ignition: 0.1% maximum
Clarity of solution: To Pass test
Sensitivity to copper: To Pass test

NEOCUPROINE HYDROCHLORIDE
Product# 53505
Synonyms: 2,9-dimethyl-1,10-phenanthroline HCl; 2,9-dimethyl-o-phenanthroline HCl.
CAS No: 7296-20-0
Formula: C_{14}H_{12}N_{2} \cdot HCl \cdot H_{2}O

F.W.: 262.75

Appearance: White to light yellow crystalline powder
Identification: Conforms to structure and standard
Melting Point: 250 Deg. C (dec.)
Assay (TLC): 98 % minimum
Assay Total base: >98.5%
Sulfated Ash: <0.1%
Clarity of solution: Passes test
Sensitivity to copper: Passes test

NEOTETRAZOLIUM CHLORIDE
Product# 53700
Synonyms: 2',2',5',5'-Tetraphenyl-3,3'-(p-diphenylene)ditetrazolium chloride; 3,3'-(4,4'Biphenylene)bis(2,5-diphenyl-2-H-tetrazolium chloride); NeoT, NTC
CAS No.: 298-95-3
Formula: C_{38}H_{28}Cl_{2}N_{8}

F.W.: 667.60

Appearance: Yellow to buff crystals and/or powder
Identification: To Pass test
Assay: > 85%
Melting Point: ~230 °C
Solubility in methanol (50 mg/ml): Clear and complete

NEUTRAL RED, 90%
Product# 54145
Synonyms: C.I. 50040; Basic Red 5; Toluylene red.
CAS No: 553-24-2
Formula: C_{15}H_{27}CIN_{4}

F.W.: 288.78

Appearance: Very dark-green to blackish-brown powder
Lambda max (In 50% Ethanol + .5 ml Acetic Acid): 540 nm
Assay: 90% minimum
Loss on drying at 110 deg.C/1hr: 8 % maximum
Visual Transition Interval: From pH 6.8 (red) To pH 8.0 (yellow)
Solubility: 0.1% in 50% EtOH + 2 ml Acetic acid: Clear red solution
Absorptivity 1%/1 cm (50% EtOH + Acetic Acid)
at Lambda max. 541.0 nm: 1370 - 1520

**NEUTRAL RED ACS**

Product# 54150

Synonyms: Basic Red 5; C.I. 50040; 3-Amino-7-dimethylamino
-2-methyl phenazine hydrochloride

CAS No: 553-24-2

Formula: C₁₅H₁₇CIN₄

Appearance: Very Dark-Green Powder

Melting Point: ~290 deg. C

Dye content: > 50%

Lambda max: 540 nm (in 50% Ethanol + 0.5 ml Acetic Acid)

Clarity of solution: To pass test

Visual Transition Interval: From pH 6.8 (red) To pH 8.0 (yellow)

**NEW COCCINE**

Product# 54156

Synonyms: Acid Red 18; Victoria Scarlet 3R; C.I. 16255

CAS No: 2611-82-7

Formula: C₂₀H₁₁N₃Na₂O₁₀S₃

Appearance: Maroon Powder

Lambda Max: 506(335)nm in water

Solubility: Soluble in water and methyl Cellosolve Very slightly soluble in ethanol

Dye content: ~75%

Water-insoluble matter: 0.2% maximum

Chloride & Sulfate: 8.0% maximum

Loss on drying: 10% maximum

**NEW FUCHSIN**

Product# 54160

Synonyms: Basic Violet 2; C.I. 42520; Magenta III; Aniline; 4-[(4-
amino-3-methylphenyl)][4-imino-3-methyl-2,5-cyclohexadien-1-ylide; Benzenamine

CAS No.: 3248-91-7

Formula: C₂₃H₂₅N₅HCl

Appearance: Green crystalline powder

Lambda Max: 551nm in 50% ethanol

**NEW METHYLENE BLUE N ZINC CHLORIDE DOUBLE SALT**

Product# 54164

Synonyms: C.I. 52030; Basic Blue 24

CAS No: 6586-05-6

Formula: C₁₈H₂₂CIN₃S* 1/2ZnCl₂

Appearance: Dark-brown to deep purple crystalline powder

Identification: Conforms to structure

Assay: 90.0 % minimum

Absorptivity(5ml/1 in water, 1 cm cell): ~630(591) nm

Solubility: Soluble in water and alcohol Forming a clear blue solution

**NICKEL (II) BROMIDE ANHYDROUS**

Product# 54170

Synonyms: Nickel Bromate

CAS No: 13462-88-9

Formula: Ni Br₂

Appearance: Yellow-brown to orange-brown To brown powder or chunks

Assay (Ni): > 99.0 %

Sulfate (SO₄): < 0.05%

Iron (Fe): < 0.02%

Cobalt (Co): <0.02%

Loss on drying: <2.50%

**NIGROSIN ALCOHOL SOLUBLE C.I. 50415**

Product# 54188

Synonyms: Solvent Black 5

CAS No: 11099-03-9

Appearance: Black Powder

Absorption max (In Ethanol): 565 nm
**NIGROSIN WATER SOLUBLE C.I. 50420**  
**Product# 54191**

**Synonyms:** Acid Black 2  
**CAS No:** 8005-03-6

**Appearance:** Black Crystalline Powder  
**Absorption max.:** 570 nm (in 50% Ethanol)  
**Solubility 1 mg/ml, H2O:** Opaque black with purple cast solution

**NILE BLUE CHLORIDE**  
**Product# 54218**

**Synonyms:** C.I. 51180  
**CAS No:** 2381-85-3  
**Formula:** C20H20ClN3O

**F.W.:** 353.85  
**Appearance:** Black to very dark green powder  
**Identification:** Conforms to structure and standard  
**Lambda max.:** 628 nm (in 50% Ethanol)  
**Loss on drying at 110 Deg. C / 1 hour:** < 10%  
**Solubility:** H2O 2 mg/ml, EGME 4 mg/ml, EtOH 2 mg/ml

**NILE BLUE A CERTIFIED**  
**Product# 54221**

**Synonyms:** C.I. 51180; Nile Blue Sulfate  
**CAS No:** 3625-57-8  
**Formula:** C40H40N6O6S

**F.W.:** 732.84  
**Appearance:** Green to greenish-black powder  
**Melting Point:** > 300 deg. C (dec.)  
**Dye content:** >65%  
**Lambda max.:** 633 nm (in 50% Ethanol)  
**Solubility:** H2O 20 mg/ml, EGME 8 mg/ml, EtOH 3 mg/ml

**NILE RED**  
**Product# 54227**

**Synonyms:** Nile Blue A Oxazine; 9-diethylamino-5H-Benzo-alpha-phenoxazine-5-one  
**CAS No:** 7385-67-3  
**Formula:** C20H18N2O2

**F.W.:** 318.38  
**Appearance:** Brown-green crystalline powder  
**Lambda max.:** 553 (310)nm in methanol  
**Melting Point:** 203 °C to 205 °C  
**Solubility:** To pass Test

**NINHYDRIN ACS**  
**Product# 54281**

**Synonyms:** 1,2,3-Indantrione monohydrate; triketohydrindene hydrate  
**CAS No:** 485-47-2  
**Formula:** C9H6O4

**F.W.:** 178.14  
**Appearance:** White to yellowish-white to light pink To tan crystalline powder  
**Identification & Melting Point:** Passes ACS test  
**Assay (HPLC):** 99.0% minimum  
**Assay (Titration):** 99.0% minimum  
**Loss on drying (at 105 Deg.C):** < 11%  
**pH (10 g/l, 25 Deg. C):** 4.6 – 5.6  
**Solubility:** To Pass Test  
**Sensitivity to Amino Acids:** To Pass Test

**NITRAZINE YELLOW**  
**Product# 54310**

**Synonyms:** 2-(2,4-Dinitrophenylazo)-1-hydroxy-naphthalene-3,6-disulfonic acid disodium salt; C.I. 14890; Nitrazol Yellow.  
**CAS No:** 5423-07-4  
**Formula:** C16H8N4Na2O11S2

**F.W.:** 542.36  
**Appearance:** Brown to yellow to orange powder  
**Identification:** Conforms to structure and standard  
**Dye content:** 85% minimum  
**Lambda max.:** 586 nm in 0.1 sodium hydroxide  
**Visual Transition Interval:** From pH 6.0 (bright yellow) To pH 7.2 (bright blue)  
**Solubility 1 mg/ml in H2O:** Clear, yellow-brown to red-brown to brown solution

**4-NITROANTHRANILIC ACID**  
**Product# 54331**

**Synonyms:** 4-Nitro-2-aminobenzoic acid  
**CAS No:** 619-17-0  
**Formula:** C7H6N2O4

**F.W.:** 182.13  
**Appearance:** Orange powder  
**Moisture Content:** 0.5% maximum  
**Assay (Titration):** 98.0% minimum  
**Melting Point:** 269 - 272°C minimum

**2-NITROBENZALDEHYDE, 98%**  
**Product# 54352**

**Synonyms:** Benzaldehyde, 2-Nitro-; o’-Nitrobenzaldehyde; 2-Nitrobenzaldehyde
CAS No.: 552-89-6
Formula: C₇H₅NO₃

F.W.: 151.12

Appearance: Yellow to tan or light gold crystalline powder
Assay: 98% minimum
Melting Point: 41 °C to 46 °C (lit.)
Boiling Point: 153 °C / 23 mm Hg (lit.)
Loss on drying: 0.5% maximum
Solubility 50 mg/ml EtOH: Clear yellow solution

4-NITROBENZALDEHYDE

Product# 54358

Synonyms: Benzaldehyde, 4-Nitro-(9CI); p-Formyl nitrobenzene; p-Nitrobenzaldehyde; 4-Nitrobenzaldehyde

CAS No.: 555-16-8
Formula: C₇H₅NO₃

F.W.: 151.12

Appearance: Yellow to tan or light gold crystalline powder
Assay: 98% minimum
Melting Point: 102 °C to 106 °C
Moisture: 0.5% maximum

3-NITROBENZONITRILE

Product# 54370

Synonyms: None known

CAS No.: 619-24-9
Formula: C₇H₄N₂O₂

F.W.: 148.12

Appearance: Pale yellow crystalline powder
Melting Point: 115 °C to 117 °C
Assay: 98.0% minimum
Loss on drying: 0.5% maximum

2-NITROBENZYL ALCOHOL

Product# 54382

Synonyms: None known

CAS No.: 612-25-9
Formula: C₇H₇NO₃

F.W.: 153.14

Appearance: Pale yellow crystalline powder
Melting Point: 70 °C to 74 °C
Boiling Point: 270 °C
Assay: 98% minimum
Moisture: 0.5% maximum

4-NITROBENZYL ALCOHOL

Product# 54388

Synonyms: Benzenearaethanol, 4-Nitro-(9CI); (Hydroxymethyl)Nitrobenzene

CAS No.: 619-73-8
Formula: C₇H₇NO₃

F.W.: 153.14

Appearance: Pale yellow crystalline powder
Assay: 99.0% minimum
Melting Point: 93 °C to 96 °C
Boiling Point: 185 °C
Moisture: 0.3% maximum
Solubility (50 mg/ml EtOH): Clear, faint yellow solution

4-NITROBENZYL BROMIDE

Product# 54396

Synonyms: a’1-Bromo-p-nitrotoluene

CAS No.: 100-11-8
Formula: O₂NC₆H₄CH₂Br

F.W.: 216.03

Appearance: Off-white to light yellow to beige crystalline powder
Identification: To pass test
Assay: 99.0% minimum
Melting Point: 96.0 °C to 100.0 °C
Decomposition Temperature: 125 °C
Moisture: 0.5% maximum
Label precautions: Poison, 6.1 - Lachrymator

4-NITROBENZYL CHLORIDE

Product# 54399

Synonyms: a-Chloro-4-nitrotoluene

CAS No.: 100-14-1
Formula: C₇H₆ClNO₂

F.W.: 171.58

Appearance: Off-white to light yellow crystalline powder
I.R.: Conforms to structure and standard
Assay: 98% minimum
Melting Point: 70 - 73 °C
Solubility (5% in CHCl3): Clear to very slightly hazy, faint yellow solution

NITRO BLUE TETRAZOLIUM

Product# 54471

Synonyms: NBT (Nitroblue tetrazolium chloride); Nitro BT

Phone: 1-732-886-3100 Fax: 1-732-886-3688 Email: dudley@dudley-chem.com
Formula: C40H30O6N10Cl2
CAS No.: 298-83-9

**Appearance:** Yellow Crystalline Powder
**Identification:** Positive
**Assay (HPLC):** 90.0 % minimum
**Sulfated Ash:** 0.3 % maximum
**Solubility (10mg/ml, H2O):** Clear yellow solution
**Melting Point:** 184 deg. C minimum
**Infrared spectrum:** Matches reference
**Water:** 4.5 % maximum

**F.W.:** 817.65

**NITROFURAZONE USP**

**Product#** 54682

**Synonyms:** Hydrazinecarboxamide, 2-[(5-nitro-2-furanyl)me thylene]-; 5-Nitro-2-furaldehyde semicarbazone

**CAS No:** 59-87-0

**Formula:** C6H6N4O4

**F.W.:** 198.14

**Appearance:** Yellow to yellow with a brown cast crystalline powder
**Identification A, B, C:** To pass tests
**Assay (dried basis):** 98.0% - 102.0%
**pH:** 5.0 - 7.5
**Loss on drying(at 105 Deg. C / 1 hour):** 0.5% maximum
**Residue on Ignition:** 0.1% maximum
**Ordinary Impurities:** To pass test
**5-nitro-2-furfuraldazine:** 0.5% maximum

**3-NITROPHENOL**

**Product#** 54802

**Synonyms:** m-Nitrophenol

**CAS No:** 554-84-7

**Formula:** C6H5NO3

**F.W.:** 139.11

**Appearance:** Yellow to tan crystalline powder
**Assay:** 99.0% - 102.5%
**Melting Point:** 104 – 108 Deg. C
**Loss on drying:** 0.5 % maximum

**4-NITROPHENOL**

**Product#** 54805

**Synonyms:** 4-Hydroxynitrobenzene; p-Nitrophenol

**CAS No:** 100-02-7

**Formula:** C6H5NO3

**F.W.:** 139.11

**Appearance:** White to yellow to tan crystalline powder
**Identification:** To pass test
**Melting Point:** 112 - 115 °C
**Boiling Point:** 279 °C
**Assay (GC):** 99.0% minimum
**Solubility(2.5% in methanol):** Clear, yellow solution

**4-(p-NITROPHENYLazo) RESORCINOL**

**Product#** 55101

**Synonyms:** 1,3-Benzene diol, 4-((4-Nitrophenyl)azo)-, p-Diazoviolet, Magneson, Magneson 1

**CAS No:** 74-39-5

**Formula:** C12H9N3O4

**F.W.:** 259.22

**Appearance:** Red-Orange Powder
**Lambda Max:** 432 nm in Methanol
**Melting Point:** 185 deg. C

**1-NITROSO-2-NAPTHOL, 98%**

**Product#** 55101

**Synonyms:** C.I. 10005; 1-Nitroso-beta-naphthol; alpha-Nitroso-beta-naphthol

**CAS No:** 131-91-9

**Formula:** C10H7NO2

**F.W.:** 173.17

**Appearance:** Brown powder
**Identification:** Conforms to structure
**Assay:** 97.5 % - 102.5%
**Melting Point:** 104 – 108 Deg. C
**Loss on drying:** 0.5 % maximum

**NITROSO-R-SALT**

**Product#** 55221

**Synonyms:** Nitro-R-Salt; 2,7-Naphthalenedisulfonic Acid

**CAS No:** 525-05-03

**Formula:** HOC10H4(NO)(SO3Na)2

**F.W.:** 377.25

**Appearance:** Yellow crystalline powder
**Assay:** 90.0 % minimum
**Loss on drying(at 110 Deg. C /1hr):** 5.0 % maximum
**Suitable for determination of Cobalt:** To Pass Test
**Solubility 0.1%(0.1N NaOH):** Clear yellow solution
**1-NONANESULFONIC ACID SODIUM SALT HPLC**  
Product# 55260

Synonyms: Nonyl Sodium Sulfonate  
CAS No: 35192-74-6  
Formula: \( C_{9}H_{19}NaO_{3}S \)

Appearance: Fine white powder  
Assay: 98 % minimum  
Water: < 2.0 %  
Max. Absorbance: 5% in H2O  
- 210 nm: < 0.050 A.U.  
- 220 nm: < 0.030 A.U.  
- 230 nm: < 0.020 A.U.  
- 260 nm: < 0.020 A.U.  
- 500 nm: < 0.020 A.U.

**3-NORADAMANTANECARBOXYLIC ACID**  
Product# 55301

Synonyms: 3-Carboxynoradamantane  
CAS No.: 16200-53-6  
Formula: \( C_{10}H_{14}O_{2} \)

Appearance: White crystalline powder  
Identification (GC-retention time): Conforms to standard  
Assay (GC): 99.0% minimum  
Impurity at 17.05 min. (rel.rt=1.34): 0.30 % maximum  
Other impurities: 0.10 % maximum  
Melting Point: 102 °C to 107 °C  
Sulfated Ash: 0.1% maximum

**NUCLEAR FAST RED**  
Product# 55400

Synonyms: C.I. 60760; Kernechtrot; FastRed B; Nuclear Fast Red NA salt  
CAS Number: 6409-77-4  
Formula: \( C_{14}H_{8}NO_{7}SNa \)

Appearance: Dark-red to deep-brown powder  
Dye Content: Minimum 92% (area)  
Chlorine (Cl): Maximum 1%  
Solubility: Dark red solution at 4 mg + 4 ml of H2O

**1-OCTANESULFONIC ACID SODIUM SALT ANHY HPLC**  
Product# 57150

Synonyms: Sodium 1-Octanesulfonate  
CAS: 5324-84-5  
Formula: \( CH_{3}(CH_{2})_{7}SO_{3}Na \)

Appearance: Fine white crystalline powder  
Assay (acidimetric): 98.0% Minimum  
Water: 2% Maximum  
Max. Absorbance (0.25 aq. Solution):  
- 200 nm: <0.100 A.U.  
- 210 nm: <0.050 A.U.  
- 220 nm: <0.030 A.U.  
- 230 nm: <0.020 A.U.  
- 240 nm: <0.010 A.U.  
- 250 nm: <0.010 A.U.  
- 260 nm: <0.010 A.U.  
(1 cm cell v HPLC grade water)

**1-OCTANESULFONIC ACID SODIUM SALT 1HY HPLC**  
Product# 57154

Synonyms: Sodium octane-1-sulfonate monohydrate  
CAS No.: 207596-29-0  
Formula: \( CH_{3}(CH_{2})_{7}SO_{3}Na*H_{2}O \)

Appearance: Fine white crystalline powder  
Assay: 99% Minimum  
Solubility (in water 10% solution): Clear & colorless  
Water: 7.0 to 9.0 %  
UV maxium absorption (1cm cell vs water):  
- 200 nm: <0.300 A.U.  
- 210 nm: <0.200 A.U.  
- 220 nm: <0.100 A.U.  
- 230 nm: <0.075 A.U.  
- 240 nm: <0.050 A.U.  
- 250 nm: <0.050 A.U.

**OCTYL GALLATE**  
Product# 57240

Synonyms: Octyl 3,4,5–Trihydroxybenzoate  
CAS No: 1034-01-1  
Formula: \( C_{15}H_{22}O_{5} \)

Appearance: White to off-white powder or crystals  
Assay: 98% minimum  
Melting Point: 98 - 102 Deg. C  
Loss on drying: < 0.50%  
Residue on Ignition: < 0.1%  
Arsenic (As): < 0.0003%  
Heavy metals (as Pb): < 0.001%

**OIL RED O CERTIFIED**  
Product# 57376

Synonyms: Solvent Red 27; C.I. 26125
**CAS No:** 1320-06-5  
**Formula:** $C_{26}H_{24}N_4O$  
**F.W.:** 408.51

**Appearance:** Dark Greenish-Brown to Black to bluish-red Powder  
**Identification:** To pass test  
**Solubility 1mg/1ml of Ethanol:Chloroform (1:1):** Clear dark red solution  
**Dye content:** > 70.0 %  
**Loss on drying(at 105 Deg. C/1 hr.):** < 5.0 %  
**Lambda Max:** 518 (359) nm (in Teluene)  
**Melting Point:** 120 deg. C

**DUDLEY CHEMICAL**  
Phone: 1-732-886-3100     Fax: 1-732-886-3688     Email: dudley@dudley-chem.com  

**ORANGE II CERTIFIED**  
**Product# 57603**

**Synonyms:** C.I. 15510  
**CAS No:** 633-96-5  
**Formula:** $C_{16}H_{11}N_2NaO_4S$  
**F.W.:** 350.33  
**Appearance:** Orange-Brown Powder  
**Assay:** 87 % min  
**Lambda Max:** 484 - 487 nm

**ORANGE IV C.I. 13080**  
**Product# 57620**

**Synonyms:** 4-(4-Anilinophenylazo)benzenesulfonic acid sodium Salt, indicator grade  
**C.A.S.:** 554-73-4  
**Formula:** $C_{18}H_{12}N_2O_7SNa$  
**F.W.:** 375.39  
**Appearance:** Orange powder  
**Lambda Max:** 443-447 nm  
**Visual Transition Interval:** From pH 1.4 (red) To pH 2.6 (yellow)

**ORANGE G CERTIFIED**  
**Product# 57644**

**Synonyms:** C.I. 16230; Acid Orange 10; Wool Orange 2G  
**CAS No:** 1936-15-8  
**Formula:** $C_{16}H_{10}N_2Na_2O_7S_2$  
**F.W.:** 452.38  
**Appearance:** Red-orange powder  
**Lambda max:** 475 nm (in water)

**ORCEIN CERTIFIED**  
**Product# 58100**

**Synonyms:** Natural Red 28  
**CAS No:** 1400-62-0

**ORCINOL MONOHYDRATE (5-METHYLRESORCINOL 1HY)**  
**Product# 58201**

**Synonyms:** 5-Methylresorcinol Monohydrate, 1,3-dihydroxy-5-methylbenzene, 3-Hydroxy-5-methylphenol, 5-Methyl-1,3-benzenediol, 3,5-Dihydroxytoluene

**CAS No:** 6153-39-5  
**Formula:** $C_{18}H_{16}O_3Na_2$  
**F.W.:** 375.39  
**Appearance:** White to light yellow crystals  
**Assay:** 99.0 % minimum  
**Identification (IR):** Passes Test  
**Total Impurities:** 0.80% maximum  
**Solubility(5% in H2O):** Clear, colorless to faint yellow solution  
**Water:** 10-13%

**OXONIC ACID, POTASSIUM SALT**  
**Product# 58902**

**Synonyms:** Potassium Oxonate  
**CAS No.:** 2207-75-2  
**Formula:** $C_4H_2KN_3O_4$  
**F.W.:** 195.17  
**Appearance:** White to off-white powder and/or chunks  
**Identification:** To conform to structure  
**Assay:** > 97.0 %  
**Melting Point:** > 300 ° C

**1-(2-PYRIDYLAZO)-2-NAPHTHOL ACS (PAN)**  
**Product# 61151**

**Synonyms:** PAN; Nickel Indictor; 2-Naphthalenol, 1-(2-pyridinylazo)-  
**CAS No:** 85-85-8  
**Formula:** $C_{16}H_{12}N_2O$  
**Dye content:** 80% minimum  
**Solubility:** Soluble in water and methyl Cellosolve, Slightly soluble in ethanol.
4-(2-PYRIDYLAZO)RESORCINOL FREE ACID ACS
Product# 61179
Synonyms: PAR Free Acid; 1,3-Benzenedi, 4-(2-Pyridinylazo)-
CAS No:  1141-59-9
Formula: C_{11}H_{9}N_{3}O_{2}

F.W.: 215.21

Appearance: Orange Powder
Solubility: Soluble in water Slightly soluble in ethanol Insoluble in ether and other low-polarity solvents
Clarity of Solution: To pass test
Suitability as a complexo-metric indicator (Pb): To pass test
Loss on drying at 110 Deg.C/1hr: <5.0%
Absorptivity 1%/1cm At Lambda max.: 403.0 nm

4-(2-PYRİDYLAZO)RESORCINOL MONOSODIUM SALT
ACS
Product# 61182
Synonyms: P.A.R.
CAS No:  16593-81-0
Formula: C_{12}H_{11}N_{3}NaO_{2}

F.W.: 237.21

Appearance: Dark-Orange to Brown Powder
Lambda max.: 411nm in methanol
Solubility: Soluble in water Slightly soluble in ethanol Insoluble in ether and other low-polarity solvents
Clarity of Solution: To pass test
Suitability as a complexo-metric indicator (Pb): To pass test
Solubility 1 mg/ml, EtOH: Clear, dark red solution
Lambda max.: 544nm in 50% ethanol

PARAROSANILINE BASE
Product# 61185
Synonyms: Rosaniline Base
CAS No:  467-62-9
Formula: C_{19}H_{19}N_{3}O

F.W.: 293.28

Appearance: Red powder
Dye Content: ~95 %
Loss on drying: < 5 %
Melting Point:  248 - 252 deg. C
Solubility 0.1% in toluene: Clear to slightly hazy red to orange solution
Lambda max.: 488nm in toluene

PARAROSANILINE ACETATE CERTIFIED
Product# 61188
Synonyms: C.I. 42500
CAS No:  6035-94-5
Formula: C_{21}H_{21}N_{3}O_{2}

F.W.: 347.42

Appearance: Dark Maroon Powder
Melting Point: 203 deg. C
Lambda Max: 545 nm in 50 % Ethanol
Dye Content: 85 % minimum

PARAROSANILINE HYDROCHLORIDE CERT. C.I. 42500
Product# 61192
Synonyms: Basic Red 9; Magenta O; Parafuchsin HCl; Paramagenta HCl
CAS No:  569-61-9
Formula: C_{19}H_{17}N_{3}*HCl

F.W.: 323.82

Appearance: Green crystalline powder
Assay: 88 % maximum
Melting Point: 268 - 270 deg. C
Solubility 1 mg/ml, EtOH: Clear, dark red solution
Lambda max.: 544nm in 50% ethanol

PARA RED
Product# 61198
Synonyms: Pigment Red 1; C.I. 12070; 1-(4-Nitrophenylazo)-2-naphthol
CAS No:  6410-10-2
Formula: C_{16}H_{11}N_{3}O_{3}

F.W.: 293.28

Appearance: Red powder
Dye Content: ~95 %
Loss on drying: < 5 %
Melting Point:  248 - 252 deg. C
Solubility 0.1% in toluene: Clear to slightly hazy red to orange solution
Lambda max.: 488nm in toluene

DUDLEY CHEMICAL
Phone: 1-732-886-3100 Fax: 1-732-886-3688 Email: dudley@dudley-chem.com
**PATENT BLUE A**  
Product# 61208  
Synonyms: Acid Blue 7; C.I. 42080  
CAS No.: 3486-30-4  
Formula: \( C_{37}H_{13}N_2NaO_6S_2 \)  
Appearance: Maroon Powder  
Lambda Max 1%E 1 cm 874: 637 nm  

**PATENT BLUE V F (C.I. 42045)**  
Product# 61210  
Synonyms: Disulphine Blue; Sulphan Blue; Acid Blue 1  
CAS No: 129-17-9  
Formula: \( C_{27}H_{31}N_2O_7NaS_2 \)  
Appearance: Dark bluish-green to violet powder  
Solubility: Soluble in alcohol  
Lambda max: 635 - 640 nm  

**PATENT BLUE V**  
Product# 61216  
Synonyms: Acid Blue 3, Food Blue 5; Acidal Camine V; Blue ZN 3  
Color Index: C.I. 42051  
Formula: \( C_{27}H_{31}NaO_8S_2 \)  
Appearance: Dark blue powder  
Dye content: > 85.0 %  
Subsidiary dyes: < 2.0%  
Water-Insoluble Matter: < 0.2%  
Leuco Base: < 4.0%  
Combined Ether Extract: < 0.2%  
Arsenic: < 3 mg/kg  
Heavy metals (as Pb): < 40 mg/kg  
Lead (Pb): < 10 mg/kg  
Mercury (Hg): < 1 mg/kg  

**1-PENTANESULFONIC ACID SODIUM SALT ANHYDROUS HPLC**  
Product# 61250  
Synonyms: n-Amylsulfonic Acid, sodium salt; Sodium Pentane-1-sulfonate monohydrate  
CAS No.: 22767-49-3  
Formula: \( CH_3(CH_2)_nSO_3Na \)  
F.W.: 174.20  
Appearance: Fine white crystalline powder  
Assay: 98% minimum  
Water: < 2%  
Maximum Absorptivity (0.25m aq.) (1cm cell vs. HPLC water):  
200 nm < 0.100 A.U.  
210 nm < 0.050 A.U.  
220 nm < 0.040 A.U.  
230 nm < 0.030 A.U.  
240 nm < 0.010 A.U.  
250 nm < 0.010 A.U.  
260 nm < 0.010 A.U.  

**1-PENTANESULFONIC ACID SODIUM SALT 1HY HPLC**  
Product# 61255  
Synonyms: Sodium 1-Pentanesulfonate Hydrate, N-Amylsulfonic acid sodium say monohydrate  
CAS No.: 207605-40-1  
Formula: \( CH_3(CH_2)_nSO_3Na * H_2O \)  
F.W.: 174.12  
Appearance: Fine white crystalline Powder  
Assay: 98% minimum  
Solubility (10% aq. Sol.): 7.0 to 9.0%  
UV Absorbance (0.25 M aq. solution):  
200 nm < 0.300 A.U.  
210 nm < 0.200 A.U.  
220 nm < 0.100 A.U.  
230 nm < 0.075 A.U.  
240 nm < 0.050 A.U.  
250 nm < 0.050 A.U.  
260 nm < 0.040 A.U.  

**PHENANTHRENEQUINONE**  
Product# 62202  
Synonyms: 9,10-Phenanthraquinone  
CAS No.: 84-11-7  
Formula: \( C_{14}H_8O_2 \)  
F.W.: 208.22  
Appearance: Burnt-Orange Powder  
Assay: 99.0 % minimum  
Melting Point: 208 - 211 deg. C  
Lambda max: 420nm in benzene 270nm in chloroform  
Solubility: Virtually insoluble in water. Soluble in benzene, ether, glacial Acetic acid and hot ethanol.  

**1,10-PHENANTHROLINE ANHYDROUS**  
Product# 62238  
Synonyms: o-Phenanthroline  
CAS No.: 66-71-7  
Formula: \( C_{12}H_{8}N_2 \)  
F.W.: 208.22  
Appearance: Burnt-Orange Powder  
Assay: 99.0 % minimum  
Melting Point: 208 - 211 deg. C  
Lambda max: 420nm in benzene 270nm in chloroform  
Solubility: Virtually insoluble in water. Soluble in benzene, ether, glacial Acetic acid and hot ethanol.
F.W.: 180.20

Appearance: White to Off-White Powder
Assay: 99.0 % minimum
Melting Point: 114 - 117 deg C
Solubility: 1gm in 10ml of Ethanol is clear and colorless
Moisture: 0.4 %
Sulfated Ash: 0.04 %

1,10-PHENANTHROLINE 1HY ACS  Product# 62242

Synonyms: o-Phenanthroline monohydrate; 4,5—Phenanthroline monohydrate
CAS No.: 5144-89-8
Formula: C₁₂H₈N₂ * H₂O

F.W.: 198.22

Appearance: White needle-like crystals, Becoming cream-colored in Storage
Melting Point: >98 Deg. C
Suitability as redox indicator: To Pass Test
Suitability for determining iron: To Pass Test
Solubility (1 gm in 10ml ethanol): Clear and colorless
Assay (dry basis): >99.0

1,10-PHENANTHROLINE 1HCL 1HY ACS  Product# 62246

Synonyms: o-Phenanthroline, 1,10-Phenanthroline hydrochloride; Phenanthroline hydrochloride
CAS No.: 3829-86-5
Formula: C₁₂H₈N₂ * HCl

F.W.: 234.69

Appearance: White crystals
Melting Point: 224 °C to 225 °C
Assay: 97% minimum
Solubility 100 mg/ml, H₂O: Clear, colorless solution

PHENOL RED FREE ACID ACS  Product# 62272

Synonyms: Phenolsulfonephthalein
CAS No.: 143-74-8
Formula: C₁₉H₁₄O₅S

F.W.: 354.38

Appearance: Bright Red to Dark Red Powder
Loss on drying At 110 Deg. C / 1 hour: 5% maximum
Lambda Max: 557 (360) nm in water + 20 ml boric buffer, pH 9
Clarity of solution: To Pass Test
Visual transition Interval: From pH 6.8 (yellow) To pH 8.2 (red)
Solubility: Slightly soluble in water, somewhat more soluble in methanol, ethanol and acetic acid and readily soluble in alkaline solutions.

PHENOL RED SODIUM SALT ACS  Product# 62277

Synonyms: Phenolsulfonephthalein Sodium
CAS No.: 34487-61-1
Formula: C₁₂H₈NaO₅S

F.W.: 376.36

Appearance: Dark-red to brownish-red powder
Identification (IR): To pass test
Loss on drying: < 5%
Clarity of solution: To Pass Test
Lambda Max: 423 nm in Methanol
Melting Point: 285 deg. C
Visual transition Interval: From pH 6.8 (yellow) to pH 8.2 (red)

PHENOLPHTHALEIN WHITE ACS  Product# 62300

Synonyms: 3,3-bis(p-hydroxyphenyl)phthalide; 3,3-bis(4-hydroxyphenyl)-1(3H)-isobenzofuranone
CAS No.: 77-09-8
Formula: C₂₀H₁₄O₄

F.W.: 318.33

Appearance: White to off-white crystalline powder
Identification A,B: To pass tests
Melting Point: 258-263 Deg. C
Clarity of alcohol solution: To Pass Test
Visual transition Interval: pH 8.0 (colorless) to pH 10.0 (red)
Assay: 97.0-101.0%
Loss on drying: 1.0 % maximum
Residue on Ignition: 0.1 % maximum
Arsenic (As): 8 ppm maximum.
Heavy metals (as Pb): 0.0015% maximum
Organic Volatile Impurities: To Pass Test
Chromatographic Impurity: <1.0%
Fluoran: To Pass Test
**PHENOSAFRANIN**  
Product# 62320  
Synonyms: C.I. 50200; 3,7-Diamino-5-phenylphenazinium chloride; Phenosafranine; Chloride; Phenosafrarine; Safrinin B Extra  
CAS No.: 81-93-6  
Formula: C_{18}H_{13}ClIN_{4}  
F.W.: 322.80  
Appearance: Green crystalline powder  
Melting Point: >300 °C  
Absorptivity 1%, 1cm at Lambda max. 529.5nm: 1500  
Dye content: ~80%  
Solubility (0.1% (water): Clear reddish orange solution  

**4-PHENYLANTHRANILIC ACID**  
Product# 62334  
Synonyms: Diphenylamine-2-carboxylic acid  
CAS No: 91-40-7  
Formula: C_{13}H_{11}NO_{2}  
F.W.: 213.24  
Assay: 98 % Minimum  
Appearance: Light Yellow to Brown Powder  
Melting Point: 183 - 188 deg. C  

**4-(PHENYLAZO)DIPHENYLAMINE**  
Product# 62334  
Synonyms: 4-Benzeneazodiphenylamine  
CAS No.: 101-75-7  
Formula: C_{18}H_{15}N_{3}  
F.W.: 273.34  
Appearance: Orange to orange-brown powder  
Assay: 97.0% minimum  
Lambda max.: 411(272) nm in ethanol  
Melting Point: 89 ° C to 91 ° C  
Solubility: Insoluble in water. Soluble in ethanol and methanol.  
Visual Transition Interval: From pH 1.2 (red) To pH 2.5 (yellow)  

**4-PHENYLAZOPHENOL**  
Product# 62335  
Synonyms: 4-Hydroxyazobenzene; Solvent Yellow 7; C.I. 11800  
CAS No.: 1689-82-3  
Formula:C_{6}H_{4}ClN_{2}O  
F.W: 198.2  

**PHENYL MercURIC ACETATE NF**  
Product# 62340  
Synonyms: PMA  
CAS No: 62-38-4  
Formula: C_{6}H_{8}HgO_{2}  
F.W.: 336.74  
Appearance: White, crystalline powder; sensitive to light  
Identification: Passes Test  
Residue on Ignition: 0.2 % max  
Mercuric Salts & Heavy metals: Passes Test  
Polymercured benzene Compounds: 1.5 % maximum  
Melting Range: 149 - 153 deg. C  
Assay: 98 - 100.5 %  
Organic Volatile impurities: Passes Test  

**PHENYL MercURIC NITRATE NF**  
Product# 62370  
Synonyms: Mercury, Hydroxy(Nitrato)diphenyldi-  
CAS No: 55-68-5 (N.F.) / 8003-05-2  
Formula: C_{12}H_{11}Hg_{2}NO_{4}  
F.W.: 634.40  
Appearance: White to off-white, odorless powder. Sensitive to light.  
Identification A, B, C: To Pass Tests  
Residue on Ignition: 0.1% maximum  
Mercury Ions: To Pass Test  
Phenylmercuric Ions: 87.0 - 87.9 %  
Mercury (Hg): 62.75 - 63.50 %  
Organic Volatile Impurities: To Pass Test  
Residual Solvents: To Pass Test  
Solubility: Soluble in approximately 1500 parts of water and approximately 1000 parts of Ethyl Alcohol at boiling temperature, more easily soluble in Glycerol, diluted Nitric Acid and diluted Alkali Hydroxides.  

**PHLOROGLUCINOL DIHYDRATE**  
Product# 62382  
Synonyms: None known  
CAS No: 6099-90-7  
Formula: C_{6}H_{5}(OH)_{3} * 2H_{2}O  
F.W: 198.2
o-PHTHALALDEHYDE

Synonyms: 1,2-Benzenedicarboxaldehyde; o-Phthalialdehyde; Phthalaldehyde; 2- Formylbenzaldehyde; 1,2-Benzenedialdehyde
CAS No: 643-79-8
Formula: C₈H₆(CHO)₂

Appearance: Yellow to orange fine crystals
Identification: To pass test
Melting Point: 54 - 55 deg C
Assay (GC): >99.0%
Water (K.F.) <0.5%
Free Acid (as Phthalic Acid): <0.3%
Solubility (10 % in Methanol): Clear, colorless solution

PHOSPHOTUNGSTIC ACID, HYDRATE

Synonyms: Phosphowolframic Acid; tungstophosphoric Acid
CAS No.: 12501-23-4
Formula: H₃PO₄*12WO₃*xH₂O

Appearance: Off-White to pale yellow crystalline powder, Turning yellow on exposure to light
Assay (with Cinchonine): 65.0% to 75.0%
Insoluble Matter: 0.020% maximum
Chloride (Cl): 0.030% maximum
Nitrate (NO₃): 0.010% maximum
Sulfate (SO₄): 0.020% maximum
Ammonium(NH₄): 0.005% maximum
Heavy Metals (as Pb): 0.005% maximum
Iron (Fe): 0.002% maximum
**PONCEAU S X**

**Appearance:** Light Red Fine powder  
**Dye content:** 87% min.  
**Loss on drying:** < 10%  
**Water Insoluble Matter:** 0.20% max.  
**5 Amino-2-4 Dimethyl-1-Benzene-6-sulphonic Acid:** 0.20% max.  
**4-Hydroxy 1-1-Naphthalene Sulphonic Acid:** 0.20% max.  
**Subsidiary Colors:** 2.0% max.  
**Lead:** 10 mg/kg max.  
**Arsenic:** 3.0 mg/kg max.  
**Mercury:** 1.0 mg/kg max.  
**Bulk Density:** 0.30 g/cc  
**Sum of Volatile matter at 135°C & Chlorides & Sulphates (as Sodium Salt):** 13% max.

**POTASSIUM ACETATE ACS**

**Synonyms:** Acetic Acid, potassium salt  
**CAS No.:** 127-08-2  
**Formula:** CH₃COOK  
**Appearance:** White to colorless crystalline powder With faint odor of acetic acid, hygroscopic  
**Assay:** > 99.0%  
**pH of 5% solution:** 4.5 - 9.0 @ 25 deg. C  
**Insoluble Matter:** 0.005% max.  
**Chloride (Cl):** 0.002% max.  
**Iodate (IO3):** 5 ppm maximum  
**Nitrite (NO2):** 0.001% max.  
**Sulfate (SO4):** 0.003% max.  
**Heavy Metals (as Pb):** 5 ppm maximum  
**Iron (Fe):** 3 ppm maximum  
**Calcium (Ca):** 0.005% max.  
**Magnesium (Mg):** 0.002% max.  
**Sodium (Na):** 0.005% max.
Appearance: White crystalline powder
Assay: 98.5% - 101.0%
Substances darkened by hot Sulfuric acid: Passes Test
Neutrality: Passes Test
Insoluble Matter: < 0.01%
Chloride (Cl): < 0.002%
Sulfate (SO4): < 0.01%
Ammonium (NH4): < 0.002%
Heavy Metals (as Pb): < 0.002%
Iron (Fe): < 0.001%
Sodium (Na): < 0.02%

**POTASSIUM PERIODATE META ACS**  Product# 63800

Synonyms: Potassium meta-periodate; Periodic acid, potassium salt
CAS No: 7790-21-8
Formula: KIO4

F.W.: 230.00

Appearance: White granular powder
Assay (dried basis): 99.8 - 100.3 %
Loss on drying: 0.10% maximum
Other halogens (as Cl): 0.01 % maximum
Manganese (as Mn): 1 ppm maximum
Aqueous solubility: 0.42 g in 100 ml at 20 deg. C
Sulfate (SO4): 0.01% maximum

**POTASSIUM THIOCYANATE ACS**  Product# 63812

Synonyms: Potassium rhodanide
CAS No: 333-20-0
Formula: CKNS

F.W.: 97.18 g/mol

Appearance: Colorless to White crystalline powder
Identification: Conforms to Structure
Assay (Titration by AgNO3): ≥ 98.5%
Melting Point: 173°C
Insoluble Matter: ≤ 0.005%
Chloride: ≤ 0.005%
Iron (Fe): ≤ 2 ppm
Heavy metals (as Pb): ≤ 5ppm
Iodate Consuming Substances: To Pass Test
Sodium (Na): ≤ 0.005%
Ammonium (NH4): ≤ 0.003%

**PRAZIQUANTEL USP**  Product# 63825

Synonyms: 2-(Cyclohexylcarbonyl)-1,2,3,6,7-11b-hexahydro-4H-pyrazino[2,1a]soquinolin-4-one
CAS No: 55268-74-1
Formula: C19H24N2O2

**PRIMULIN C.I. 49000**  Product# 63850

Synonyms: C.I. 49000; Direct Yellow 59; Primuline Yellow; Thioflavine S
CAS No: 8064-60-6
Formula: C21H14N3O3S3Na

F.W.: 475.53

Appearance: Yellow to yellow-gold to orange to light brown powder and/or crystals
Identification: Conforms to structure and standard
Assay: 50 % minimum
Melting Point: > 300 Deg. C
U.V. Absorption (in H2O): Lambda max. 345 - 355 nm
Solubility(1 mg/ml in Methanol): Clear to very slightly hazy yellow to yellow-green solution

**PROFLAVINE HCL**  Product# 63879

Synonyms: 3,6-Diaminoacridine HCL
CAS No.: 952-23-8
Formula: C13H11N3.HCl

Appearance: Red-Brown Powder
Assay: 98% Minimum
Solubility: To pass test
pH of Saturated Solutions: 6 to 8
Loss on drying(105 Deg. C For 1 HR): 6.5% Maximum
Residue on Ignition: 1.5% Maximum

**PROFLAVINE HEMISULFATE**  Product# 63881

Synonyms: 3,6-Diaminoacridine hemisulfate, 98%; 3,6-Acridinediamine,
**DUDLEY CHEMICAL**

**1-PROPANESULFONIC ACID SODIUM SALT HPLC**

Product# 63911

Synonyms: 1-Propanesulfonic Acid Sodium Salt Anhydrous

Formula: C₇H₁₂O₃SNa*H₂O

CAS No.: 304672-01-3

Appearance: White Powder, Fibrous powder or flakes
Assay (acidimetric): 99.0 %
Melting Point: 250 deg. C

**1-PROPANESULFONIC ACID SODIUM SALT 1HY HPLC**

Product# 63913

Synonyms: None known

CAS No.: 304672-01-3

Formula: C₃H₇O₃SNa*H₂O

Appearance: White crystalline powder
Assay: 98% minimum
Melting Point: > 250 C

**2-PROPANESULFONIC ACID SODIUM SALT 1HY HPLC**

Product# 63915

Synonyms: Sodium Propane-2-sulfonate


Formula: C₃H₇NaO₃S.H₂O

Appearance: Dark Green Powder
Lambda Max: 441 nm in Methanol
Residue on Ignition: 0.4% maximum
Suitability as Indicator for Complexometry: To pass test

**PYROGALLOL**

Product# 64847

Synonyms: 1,2,3-Benzenetriol; 1,2,3-Trihydroxybenzen; 1,2,3-Trihydroxybenzene, Pyrogallic acid

CAS No.: 87-66-1

Formula: C₆H₆(OH)₃

Apparent: Orange to Brown to Red Powder
Assay (Dry Bases): 98% minimum
Infrared Spectrum: Conforms to Structure
Residue on Ignition: 1.0% maximum
Loss on drying: 6.5% maximum
pH of saturated solution: 6 to 8
Solubility: Soluble in water, more soluble in hot water, soluble in Glycerine

**APROPYL RED**

Product# 64200

Synonyms: 2-4(Dipropylamine)phenylazo-Benzoic Acid

CAS No.: 2641-01-2

Formula: C₁₉H₂₃N₂O₂

Appearance: Reddish crystalline powder
Assay: 98% Minimum
Max. Absorbance (0.25 aq. Solution):

<table>
<thead>
<tr>
<th>Wavelength (nm)</th>
<th>Absorbance (A.U.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>230</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>240</td>
<td>&lt;0.03</td>
</tr>
<tr>
<td>250</td>
<td>&lt;0.02</td>
</tr>
<tr>
<td>260</td>
<td>&lt;0.02</td>
</tr>
<tr>
<td>270</td>
<td>&lt;0.02</td>
</tr>
</tbody>
</table>

**PURPURIN**

Product# 64701

Synonyms: 9,10-Anthracenedione, 1,2,4-Trihydroxy, C.I. 1027, C.I. 75410 Hydroxylizaric Acid, C.I. No.: 58205

CAS No.: 81-54-9

Formula: C₁₄H₈O₅

Appearance: Dark-red to orange-brown powder
Melting Point: 253 °C to 256 °C
Lambda max: 485(521) in methanol
Dye content: ~90%
Solubility (1mg/ml NH₄OH): Red to very dark red to purple solution

**PYROCATECHOL VIOLET**

Product# 64825

Synonyms: Pyrocatechol Sulfonphthalein; 1,2-Benzenediol

CAS No: 115-41-3

Formula: C₁₉H₁₄O₇S

Appearance: Dark Green Powder
Lambda Max: 441 nm in Methanol
Residue on Ignition: 0.4% maximum
Suitability as Indicator for Complexometry: To pass test
**DUDLEY CHEMICAL**

**PYROGALLOL RED**  
Product# 64854

Synonyms: Pyrogallolsulfonephthalein  
CAS No: 32638-88-3  
Formula: C_{19}H_{12}O_{8}S

Appearance: Dark red to dark green to brown or black powder  
Identification (IR): Conforms to standard  
Melting Point: ≥ 300˚ C  
Lambda Max: 480 (282) nm in Ethanol  
Sulfated Ash: 0.5% maximum  
Suitable as Metal Indicator: To pass test  
Solubility: H2O 1 mg/ml, EGME 3 mg/ml, EtOH 4 mg/ml

**PYRONIN B CERTIFIED**  
Product# 64922

Synonyms: C.I. 45010  
CAS No: 2150-48-3  
Formula: C_{42}H_{36}C_{8}Fe_{2}N_{4}O_{2}

Appearance: Dark green crystals  
Identification: Conforms to structure and standard  
Dye content: 30% minimum  
Lambda Max: 553nm in Ethanol  
Melting Point: 174 - 176 Deg. C  
Solubility: Soluble in water, ethylene glycol, methyl acetate and ethyl acetate; slightly soluble in the lower alcohols and methyl Cellosolve.

**PYRONIN Y CERTIFIED**  
Product# 64930

Synonyms: C.I. 45005; Pyronin G; Methyl pyronin; Tetramethyl pyronin

**QUERCETIN DIHYDRATE**  
Product# 68100

Synonyms: 2-(3,4-Dihydroxyphenyl)-3,5,7-trihydroxy-4H-1-benzopyran-4-one dihydrate; 3,3',4',5,7-Pentahydroxyflavone dihydrate  
CAS No: 6151-25-3  
Formula: C_{15}H_{10}O_{7}\cdot2H_{2}O

Appearance: Yellow to yellow with a green to brown cast powder  
Assay (HPLC): > 98 %  
Loss on drying: 9.5% - 12.5%  
Melting Point: > 300 Deg. C  
Residue on ignition: <0.2%  
Solubility: Dark red solution at 200 mg plus 4 ml of 1M Sodium Hydroxide

**QUINALDINE RED**  
Product# 68150

Synonyms: 2-(p-Dimethylaminophenylethylene)quinolineethiodide  
CAS No.: 117-92-0  
Formula: C_{21}H_{23}IN

Appearance: Dark green to black powder  
Identification: Conforms to structure and standard  
Lambda max: 528nm in ethanol  
Dye content: ~95%  
Solubility (0.1% in ethanol): Clear dark red to purple solution  
Visual Transition Interval: From pH 1.4 (colorless) To pH 3.2 (red)

**QUINHYDRONE 97%**  
Product# 68182

Synonyms: Hydroquinine: Benzoquinine 1:1 Complex  
CAS No.: 106-34-3  
Formula: C_{6}H_{10}O_{2} C_{6}H_{4}O_{2}
QUININE SULFATE DIHYDRATE  Product# 68192

Synonyms: 6′-Methoxycinchonan-9-ol sulfate
CAS No.: 6591-63-5
Formula: C_{20}H_{24}N_{2}O_{2}S

Appearance: Fine, white, crystalline powder, odorless; darkens on exposure to light

Assay: 99.0% to 101.0%
Water: 4.0% to 5.5%
Residue on Ignition: 0.1% maximum
Heavy metals: 0.001% maximum
Chloroform-alcohol-insoluble Substances: 0.1% maximum
Chromatographic Purity: To pass test
Organic Volatile impurities: To pass test
Specific Optical Rotation: +275 Deg. To +288 Deg.
Limit of Dihydroquinine Sulfate: <10.0%
Residual Solvents (Toluene): 890 ppm maximum
Solubility (5% in 95% ethanol): Clear, colorless - faint yellow solution

QUININE SULFATE DIHYDRATE USP  Product# 68234

Synonyms: Quinine sulfate; Quinine bisulfate; Quinine hydrogen sulfate
CAS No.: 6119-70-6
Formula: (C_{20}H_{24}N_{2}O_{2})_{2}H_{2}SO_{4}, H_{2}O

F.W.: 782.94

Appearance: White, fine, needle-like crystals. Odorless, has a persistent, very bitter taste. It darkens on exposure to light.

Identification A,B,C: To pass tests
Specific Rotation: -235 - -245 °C
Water: <10.0%
Residue on Ignition: 0.15% maximum
Heavy metals: 0.001% maximum
Assay (anhydrous basis): 99.0% to 101.0%
Chloroform-Alcohol insoluble Substances: <0.1%
Chromatographic Purity: To pass test
Limit of Dihydroquinine Sulfate: <10.0%
Residual Solvents (Toluene): 890 ppm maximum
Solubility (5% in 95% ethanol): Clear, colorless - faint yellow solution

QUINLINE YELLOW, SPIRIT SOLUBLE C.I.47000  Product# 68298

Synonyms: Solvent Yellow 33; D&C Yellow No. 11; C.I. 47000
CAS No: 8003-22-3
Formula: C_{18}H_{11}NO

F.W.: 273.29

Appearance: Yellow-Gold Powder
Lambda Max: 413 (435) nm in Methanol
Solubility (1mg/ml, CHCl3): Clear, dark yellow solution

QUINLINE YELLOW W/S C.I.47005  Product# 68301

Synonyms: C.I. 47005; Acid Yellow 3
CAS No: 8004-92-0
Formula: C_{19}H_{9}NNaO_{8}S_{2}

F.W.: 489.4

Appearance: Yellow to gold to orange powder
Identification: Passes test
Lambda Max: 413 nm in Water
Total dye content, corrected
For sample dried at 105 deg.C For 2 hours: > 95%
Solubility 1 mg/ml, H2O: Clear to slightly hazy, yellow solution

**REACTIVE BLUE 2**

Product# 69015

Synonyms: Cibacron Blue 3G-A, Procion Blue HB, CI 61211
CAS No.: 12236-82-7
Formula: C_{29}H_{20}CIN_{7}O_{11}S_{3}

Appearance: Blue Fine Powder
Identification (IR): Conforms to Standard
Dye Content: 94% minimum
Iron (Fe): 70 ppm minimum
Heavy metals (as Pb): 3 ppm maximum
Loss on drying (135˚C, 1Hr): 6% maximum

F.W.: 774.16

**REACTIVE BLUE 4**

Product# 69020

Synonyms: C.I. No.: 61205
CAS No.: 13324-20-4
Formula: C_{23}H_{14}C_{12}NGO_{8}S_{2}

Appearance: Bright Bluish Fine Powder
Dye Content: Minimum 18% Maximum 25%
Lambda Max: 595nm (in water)

F.W.: 637.44

**REACTIVE RED 4**

Product# 69040

Synonyms: C.I. 18105; Procion Brilliant Red H-7B;
Cibacron Brilliant Red 3B-A
CAS No.: 17681-50-4
Formula: C_{32}H_{29}Cl_{4}N_{4}O_{18}S_{4}

Appearance: Maroon-purple to burgundy powder
Dye Content: Minimum 50%
Lambda Max: 517nm (in water)

F.W.: 995.23

**REINECKE SALT ACS**

Product# 69091

Synonyms: Ammonium diamminetetralcis(thiocyanato-N) chromate(1-); Ammonium reineckate; Ammonium tetrahydroxanodiammonochromate
CAS No: 13573-16-5
Formula: NH_{4}[Cr(SCN)_{4}(NH_{3})_{2}] * H_{2}O

Appearance: Dark red to rust to purple powder
Identification (IR): To conform to standard
Assay (titration): 93.0 % minimum
Insoluble in diluted Hydrochloric acid: 0.05 % maximum
Aqueous solubility: Soluble in hot water; sparingly in cold
Sensitivity Passes test

F.W.: 354.45

**RESAZURIN SODIUM SALT CERTIFIED**

Product# 69101

Synonyms: Alamar Blue; 7-Hydroxy-3H-phenoxazin-3-one-10-oxide, sodium salt
CAS No: 62758-13-8
Formula: C_{12}H_{6}NNaO_{4}

Appearance: Dark green to black Powder
Dye content: > 75%
Lambda Max: 598(380)nm in water
Solubility: Soluble in water, insoluble in ether, and slightly soluble in alcohol and acetic acid.
Visual transition Interval: From pH 3.5 (orange) To pH 6.5 (bluish-violet)

F.W.: 251.18

**RESORCIN BLUE**

Product# 69149

Synonyms: None Known
C.A.S. No.: 42249-61-6

Appearance: Dark blue powder
Lambda Max(in water): 580-605 nm

**RHODAMINE B**

Product# 70150

Synonyms: Basic Violet 10; C.I. 45170
CAS No: 81-88-9
Formula: C_{28}H_{31}Cl_{2}N_{2}O_{3}

Appearance: Dark blue powder
Lambda Max(in water): 580-605 nm
**DUDLEY CHEMICAL**

**RHODAMINE B BASE**  
Product# 70153

Synonyms: Sovent Red 49; C.I. 45170.1  
CAS No: 509-34-2  
Formula: C_{28}H_{30}N_{2}O_{3}  
F.W.: 442.55

Appearance: Pink to Red-Pink Powder and/or Chunks  
Infrared Spectrum: Conforms to structure and Standard  
Assay: 97% minimum  
UV-Visible Spectrum: In Methanol E(544 +/- 2NM) => 103,000  
Solubility: 1 MG/ML, Ethanol; Clear to slightly hazy, Pink-Orange to Dark Pink Solution.

**RHODAMINE 6G C.I. 45160**  
Product# 70165

Synonyms: Basic Red I  
CAS No.: 989-38-8  
Formula: C_{28}H_{31}ClN_{2}O_{3}

Appearance: Reddish-Brown to Green-Brown Crystalline Powder  
UV wavelength: 501nm maximum  
Assay: ~95%  
Solubility (1 mg/ml, Ethanol): Clear to slightly hazy, yellow orange to red. Solution, may have green cast.  
Titration (With Karl Fischer Reagent): 2%-10% H2O

**RHODAMINE 123 HYDRATE**  
Product# 70160

Synonyms: 2-(6-Amino-3-Imino-3H-Xanthan-9-YL) Benzoic acid methyl ester monohydro-chloride; RH123  
CAS No.: 123333-76-6  
Formula: C_{21}H_{16}N_{2}O_{3} \cdot$\text{H}_{2}O  
F.W.: 416.87

Appearance: Reddish-Brown to Green-Brown Crystalline Powder  
UV wavelength: 501nm maximum  
Assay: ~95%  
Solubility (1 mg/ml, Ethanol): Clear to slightly hazy, yellow orange to red. Solution, may have green cast.  
Titration (With Karl Fischer Reagent): 2%-10% H2O

**RHODAMINE 6G PERCLORATE**  
Product# 70170

Synonyms: 9-[2-(ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylum perchlorate  
CAS No.: 13161-28-9  
Formula: C_{28}H_{31}ClN_{2}O_{7}  
F.W.: 543.02

Appearance: Dark red to brown fine crystals  
Melting Point: 263 °C to 265 °C  
Lambda max.: 528nm  
Assay (HPLC): 97% minimum  
Solubility: Soluble in water, more soluble in ethanol

**RHODIZONIC ACID DISODIUM SALT, 98%**  
Product# 71102

Synonyms: Sodium rhodizonate dibasic, 98%  
CAS No.: 523-21-7  
Formula: C_{6}Na_{2}O_{6}  
F.W.: 214.04

Appearance: Green-grey to dark-green powder  
Identification (IR): To conform to standard  
Assay (total base): 97.5% minimum  
Solubility(5 mg/ml, H2O): Clear dark orange to orange red solution

**ROSE BENGAL CERTIFIED**  
Product# 71150

Synonyms: Acid Red 94; C.I. 45440; 4,5,6,7-tetrachloro-2’4’5’7’-tetraiodofluorescein disodium salt; C.I. No: 45440  
CAS No: 632-68-8  
Formula: C_{20}H_{20}O_{5}Cl_{4}I_{4}Na_{2}

Phone: 1-732-886-3100     Fax: 1-732-886-3688     Email: dudley@dudley-chem.com
**DUDLEY CHEMICAL**

**F.W.: 1017.65**

Appearance: Dark red to red-brown powder
Lambda max: ~548 nm (in H2O + 1 ml 1% Sodium Carbonate)
Dye content: 80% minimum
Solubility 0.1% (H2O): Red solution

**ROSOLIC ACID**
Product# 72201

Synonyms: C.I. 43800
CAS No: 603-45-2
Formula: \( C_{19}H_{14}O_{3} \)

**F.W.: 290.32**

Appearance: Red to reddish-brown powder
Lambda max: 482 nm (in Ethanol + 2ml 1N Hydrochloric Acid)
Visual Transition Interval: From pH 6.6 (yellow) To pH 8.0 (pink)
Loss on drying (110 Deg. C/1 hour): < 3.0%
Solubility: Soluble in ethanol (golden yellow), moderately soluble in glacial acetic acid and slightly soluble in water, ether and chloroform.
Solubility (in ethanol 96%): Clear orange solution

**SAFFRON C.I. 75100**
Product# 73110

Synonyms: Natural yellow 6, C.I. 75100
CAS No: 42553-65-1
Formula: \( C_{20}H_{24}O_{4} \)

**F.W.: 328.39**

Appearance: Red and Yellow Fibers
Lambda max: 427 (452) nm in Ethanol
Solubility: To pass test

**SAFRANINE O CERTIFIED**
Product# 73151

Synonyms: Basic Red 2; C.I. 50240; 3,7-diamino-2,8-dimethyl-5-phenylphenazinium chloride
CAS No: 477-73-6
Formula: \( C_{20}H_{19}ClN_{4} \)

**F.W.: 350.85**

Appearance: Dark-Green crystalline Powder
Lambda max: 530 nm in 50 % Ethanol
Dye content: 95% minimum
Solubility 1 mg/ml, H2O: Opaque red solution
Loss on drying: 5% maximum

**SALICYLAMIDE 99%**
Product# 73480

Synonyms: o-Hydroxybenzamide; 2-Hydroxybenzamide; Salamide; Salamin; Salicylamid; Salicylic acid amide;
CAS No: 65-45-2
Formula: \( C_{7}H_{7}NO_{2} \)

**F.W.: 137.14**

Appearance: White Crystalline Powder
Assay (by Titration): 98.5% - 101.5%
Identification (IR): Conforms to Structure
Loss on Drying: 0.5 % maximum
Heavy Metals: 0.001 % maximum
Melting Point: 139˚C to 142˚C
Residue on Ignition: 0.1% maximum

**SALICYLIC ACID ACS**
Product# 73500

Synonyms: Benzoic acid, 2 hydroxy; o-Hydroxybenzoic acid; 2-Hydroxy benzoic acid; Orthohydroxybenzoic acid
CAS No: 69-72-7
Formula: \( C_{7}H_{6}O_{3} \)

**F.W.: 138.12**

Appearance: White, fine crystalline powder
Assay: \( \geq 99.0 \% \)
Melting Point: 158.0 – 161.0 °C
Residue after ignition: 0.01 % maximum
Chloride(Cl): 0.001 % maximum
Sulfate(SO4): 0.003 % maximum
Heavy metals(as Pb): 5 ppm maximum
Iron (Fe): 2 ppm maximum
Substances darkened by Sulfuric Acid: To Pass Test

**SILVER IODIDE PURIFIED**
Product# 74130

Synonyms: Neosiluol
CAS No: 7783-96-2
Formula: AgI

**F.W.: 234.79**

Appearance: Dark-Green crystalline Powder
SILVER PROTEIN MILD  
**Product# 74151**

**Synonyms:** Protargol S  
**CAS No.:** 9015-51-4  
**Formula:** Ag  
*F.W.: 107.87*

**Appearance:** Brown or Black flakes, or granulated Powder  
**Identification A,B,C:** To pass tests  
**Silver Content:** 19 - 23 %  
**Solubility:** Practically insoluble in alcohol and ether, slowly soluble in Water  
**Alkalinity:** > 1.5 ml NaOH 0.1 N  
**Silver Salts:** No opalescence  
**Appearance of Solution 20 mg/ml, H2O:** Opaque, brown solution

SILVER PROTEIN STRONG  
**Product# 74160**

**Synonyms:** Strong Protargin, Silver Nucleate  
**CAS No.:** 9008-42-8  
**Appearance:** Light yellow-brown to brown, odorless powder  
**Identification A,B,C:** To pass tests  
**Silver Content:** 7.5 – 8.5%  
**Solubility:** Practically insoluble in alcohol and ether, slowly soluble in water  
**Alkalinity:** > 1.5 ml NaOH 0.1 N  
**Silver Salts:** No opalescence  
**Appearance of solution 20 mg/ml, H2O:** No residue after 30 minutes  
**Moisture:** 3.50% maximum  
**Ash:** 22.0% maximum

SIRIUS RED (DIRECT RED 80)  
**Product# 74190**

**Synonyms:** C.I. 35780  
**CAS No.:** 2610-10-8  
**Formula:** C45H32N10O21S6  
*F.W.: 1373.09*

**Appearance:** Red to purple to dark brown powder  
**Identification:** Conforms to structure and standard  
**Dye content:** 20 - 25%  
**Lambda max:** 528nm  
**Solubility:** Soluble in water; very slightly soluble in ethanol; insoluble in xylene

SODIUM ACETATE TRIHYDRATE ACS  
**Product# 74210**

**Synonyms:** Acetic Acid, sodium salt trihydrate  
**CAS No:** 6131-90-4  
**Formula:** NaC2H3O2·3H2O  
*F.W.: 136.08*

**Appearance:** White to colorless crystals and/or crystalline powder  
**pH of a 5% solution:** 7.5 - 9.2 at 25 deg. C  
**Substances reducing permanganate:** Passes Test  
**Insoluble matter:** 0.005 % maximum  
**Chloride (Cl):** 0.001 % maximum  
**Phosphosphate (PO4):** 5 ppm maximum  
**Sulfate (SO4):** 0.002 % maximum  
**Heavy metals (Pb):** 5 ppm maximum  
**Iron (Fe):** 5 ppm maximum  
**Calcium (Ca):** 0.005 % maximum  
**Magnesium (Mg):** 0.002 % maximum  
**Potassium (K):** 0.005 % maximum

SODIUM BISMUTHATE  
**Product# 74242**

**Synonyms:** Sodium Bismuth oxide  
**CAS No.:** 12232-99-4  
**Formula:** NaBiO3  
*F.W.: 279.97*

**Appearance:** Yellow to Brown Powder  
**Titration by KMNO4 (NABIO3):** ≥ 80.0%  
**Chloride Content:** ≤ 0.002%  
**Oxidizing Efficiency:** ≥ 99.6%  
**Manganese (Mn):** ≤ 5 ppm  
**X-Ray Diffraction:** Conforms to Structure

SODIUM BROMIDE ACS  
**Product# 74290**

**Synonyms:** Sedoneural  
**CAS No:** 7647-15-6  
**Formula:** NaBr  
*F.W.: 102.89*

**Appearance:** White crystalline powder  
**Assay (corrected):** ≥ 99.0 %  
**pH of a 5% solution:** 5.0 - 8.8 at 25 °C  
**Insoluble matter:** 0.005 % maximum  
**Bromate (BrO3):** 0.001 % maximum  
**Chloride (Cl):** 0.2 % maximum  
**Nitrogen Compounds(as N):** 5 ppm maximum  
**Sulfate (SO4):** 0.002 % maximum  
**Barium (Ba):** 0.002 % maximum  
**Heavy metals (Pb):** 5 ppm maximum  
**Iron (Fe):** 5 ppm maximum  
**Calcium (Ca):** 0.002 % maximum  
**Magnesium (Mg):** 0.001 % maximum  
**Potassium (K):** 0.1 % maximum
**SODIUM CARBONATE MONOHYDRATE ACS**  
Product# 74290

**Synonyms:** None Known  
**CAS No.:** 5968-11-6  
**Formula:** Na₂CO₃·H₂O  
**F.W.:** 124.00

**Appearance:** White Powder  
**Assay (by HCL Titration):** 99.5% minimum  
**Melting Point:** 95 °C to 98 °C  
**Solubility:** Clear Colorless Solution at 100mg/ml in water

---

**SODIUM COBALTNITRITE ACS**  
Product# 74305

**Synonyms:** Sodium hexanitrocobaltate (III), Trisodium Hexakis (Nitro-N) Cobaltate (3-)  
**CAS No.:** 13600-98-1  
**Formula:** Na₃Co(NO₂)₆  
**F.W.:** 403.94

**Appearance:** Yellow, Orange to Orange-Brown powder  
**Insoluble matter (in dilute CH₃COOH):** < 0.02%  
**Suitability for Potassium determination:** To pass test

---

**SODIUM DIETHYLDITHIOCARBAMATE 3HY ACS**  
Product# 74312

**Synonyms:** Diethylthiocarbamic acid sodium salt Trihydrate; Dithiocarb; Diethyl sodium Dithiocarbamate trihydrate  
**CAS No.:** 20624-25-3  
**Formula:** (CH₃CH₂)₂NCSNa·3H₂O  
**F.W.:** 225.31

**Appearance:** White to off-white crystalline powder and/or chunks  
**Melting Point:** 92 – 96 °C  
**Solubility in Water (1g/50 ml in H₂O):** Clear colorless solution  
**Sodium (as Na₂SO₄):** 30.5 - 32.5 %  
**Sensitivity to Copper:** Passes Test

---

**SODIUM DECYL SULFATE HPLC**  
Product# 74391

**Synonyms:** Decyl Sodium Sulfate; Decylsulfuric acid sodium salt; Sulfuric acid, monodecyl ester, sodium salt.  
**CAS No.:** 142-87-0  
**Formula:** CH₃(CH₂)₁₀OSO₃Na  
**F.W.:** 260.33

**Appearance:** White crystalline powder and/or flakes  
**Assay (acidimetric):** > 98.50%  
**Water (K.F.):** < 1.50%  
**Max. Absorbance** (0.005 M in water) (1 cm cell):  
- 200 nm < 0.100 A.U.  
- 210 nm < 0.050 A.U.  
- 220 nm < 0.040 A.U.  
- 230 nm < 0.030 A.U.  
- 250 nm < 0.010 A.U.  
- 280 nm < 0.010 A.U.  
**Appearance of solution (25% in water at 25˚C):** Clear, colorless to slightly yellow

---

**SODIUM DODECYL SULFATE ELECTROPHORESIS**  
Product# 74440

**Synonyms:** Sodium lauryl sulfate; Duponol; Dodecyl sodium sulfate  
**CAS No.:** 151-21-3  
**Formula:** CH₃(CH₂)₁₁OSO₃Na  
**F.W.:** 288.38

**Appearance:** Fine, white or slightly yellow powder  
**Assay (G.C.):** 99.0% minimum  
**pH of a 1% solution at 25 Deg. C:** 5.0 - 8.0  
**U.V. Absorbance** (3% aqueous solution):  
- 260 nm < 0.10 AU  
- 280 nm < 0.075 AU  
**Chloride (Cl):** < 0.01%  
**Heavy metals (as Pb):** < 2 ppm  
**Iron (Fe):** < 1 ppm  
**Phosphate (PO₄):** < 1 ppm  
**Nitrogen (N):** < 5 ppm

---

**SODIUM MOLYBDATE DIHYDRATE ACS**  
Product# 74458

**Synonyms:** Molybdic acid, disodium salt, dihydrate  
**CAS No.:** 10102-40-6  
**Formula:** Na₂MoO₄·2H₂O  
**F.W.:** 241.95

**Appearance:** White, odorless crystals  
**Assay:** 99.50 - 103.0%  
**pH of a 5% solution:** 7.0 – 10.5  
**Insoluble Matter:** < 0.005%  
**Chloride (Cl):** < 0.005%  
**Phosphate (PO₄):** < 5 ppm  
**Sulfate (SO₄):** < 0.015%
Ammonium (NH4): < 0.001%
Heavy metals (as Pb): < 5 ppm
Iron (Fe): < 0.001%

**SODIUM NITRATE ACS**

Product# 74498

Synonyms: Nitratine; Nitric acid, sodium salt; Sodium saltpeter
CAS No: 7631-99-4
Formula: NaNO₃

Appearance: White crystalline powder
Assay: > 99.0%
pH of a 5% solution: 5.5 - 8.3 @ 25 deg. C
Insoluble Matter: 0.005 % maximum
Chloride (Cl): 0.001 % maximum
Sulfate (SO₄): 0.003% maximum
Nitrite (NO₂): 0.001 % maximum
Calcium (Ca): 0.005 % maximum
Iodate (IO₃): 5 ppm maximum
Magnesium (Mg): 0.002 % maximum
Phosphate (PO₄): 5 ppm maximum
Heavy Metals (as Pb): 5 ppm maximum
Iron (Fe): 3 ppm maximum

**SODIUM NITRITE ACS**

Product# 74530

Synonyms: Nitrous acid, sodium salt
CAS No: 7632-00-0
Formula: NaNO₂

Assay: > 97.0%
Insoluble Matter: < 0.01 % maximum
Chloride (Cl): < 0.01 % maximum
Sulfate (SO₄): < 0.01 % maximum
Calcium (Ca): < 0.01 % maximum
Potassium (K): < 0.005 % maximum
Heavy Metals (Pb): < 0.001 % maximum
Iron (Fe): < 0.001 % maximum

**SODIUM NITROFERRICYANIDE 2HY ACS**

Product# 74561

Synonyms: Disodium Pentakis(cyano-C)nitrosylferrate (2-)Dihydrate; Sodium Pentacyanonitrosoferrate(III) Dihydrate.
CAS No: 13755-38-9
Formula: Na₂Fe(CN)₅NO⁺H₂O

Appearance: Ruby red crystals
Assay: 99.0-102.0%

**SODIUM OCTYL SULFATE**

Product# 74575

Synonyms: Sulfuric acid, monoctyl ester, sodium salt
C.A.S.: 142-31-4
Formula: C₈H₁₇OSO₃Na

Appearance: Fine white crystalline powder
Identity (IR-spectrum): Conforms
Assay (acidimetric) (calculated on dried substance): 99.0% Minimum
Loss on drying (60 Deg. C, vacuum): 1.0% maximum
Chloride (Cl): 0.1% maximum
Sulfate (SO₄): < 0.01 % maximum
Calcium (Ca): < 0.01 % maximum
Potassium (K): < 0.005 % maximum
Heavy Metals (Pb): < 0.004% maximum
Iron (Fe): < 0.001%

**SODIUM OXALATE ACS**

Product# 74588

Synonyms: Oxalic Acid Disodium Salt; Ethanedioic Acid Disodium salt
CAS No: 62-76-0
Formula: (COONa)₂

Appearance: White fine powder
Assay: > 99.5%
Insoluble Matter: < 0.005%
Loss on drying: < 0.01%
Neutrality: Passes Test
Chloride (Cl): < 0.002%
Sulfate (SO₄): < 0.002%
Ammonium (NH₄): < 0.002%
Heavy Metals (as Pb): < 0.002%
Iron (Fe): < 0.001%
Potassium (K): < 0.005%
Substances darkened by hot Sulfuric Acid: Passes Test

**SODIUM META-PERIODATE ACS**

Product# 74590

Synonyms: Sodium metaperiodate; Periodic acid, sodium salt
CAS No: 7790-28-5
Formula: NaIO₄

Appearance: White, odorless, crystalline powder
Assay (dried basis): 99.8 - 100.3%
SODIUM PYRUVATE  
Product# 74682

Synonyms: 2-Oxopropanoic acid sodium salt; Sodium alpha-Ketopropionate; Sodium pyruvate
C.A.S.: 113-24-6
Formula: C_3H_3NaO_3

F.W.: 110.04

Appearance: White crystalline powder
Assay: 99% Minimum
Pyruvic Acid: > 76%
Transparency: >90%
Solubility 100 mg/mL, H_2O: Clear colorless solution
Loss on drying: <0.5%
Sulfate: <20 ppm
Chloride: <20 ppm
Arsenic: <1 ppm
Heavy Metals: <10 ppm

SODIUM THIOCYANATE ACS  
Product# 75825

Synonyms: Sodium rhodanide
CAS No: 540-72-7
Formula: NaSCN

F.W.: 81.07

Appearance: Colorless to White crystalline powder
Identification: Conforms to Structure
Assay (Titration by AgNO_3): ≥ 98.0%
Melting Point: 287°C
Insoluble Matter: ≤ 0.005%
Chloride: ≤ 0.01%
Iron (Fe): ≤ 2 ppm
Heavy metals (Pb): ≤ 5 ppm
Sulfate (SO_4): ≤ 0.01%
Ammonium (NH_3): ≤ 0.002%
Carbonate (as NaCO_3): ≤ 0.2%
Sulfide (S): ≤ 0.001%

SODIUM TUNGSTATE 2HY ACS  
Product# 75851

Synonyms: Tungstic Acid Sodium Salt Dihydrate
CAS No: 10213-10-2
Formula: Na_2WO_4 * 2H_2O

F.W.: 329.86

Appearance: White fine crystalline powder
Identification: Passes test
Assay: 99.0 - 101.0 %
Insoluble matter: 0.01 % maximum
Titrable free base: 0.02 meq/g maximum
Chloride (Cl): 0.005 % maximum
Nitrogen Compounds (as N): 0.001 % maximum
Molybdenum (Mo): 0.001 % maximum
Sulfate (SO_4): 0.01 % maximum
Arsenic (As): 5 ppm maximum
Heavy Metals and Iron (as Pb): 0.001 % maximum

SALICYLIC ACID MONOSODIUM SALT  
Product# 74820

Synonyms: Sodium Salicylate 2-Hydroxybenzoic acid sodium salt
CAS No: 54-21-7
Formula: C_7H_5NaO_3

F.W.: 160.10

Appearance: White shiny flakes or crystalline powder
Assay: 99.0 - 101.0% (with HClO4)
Loss on drying: < 0.5%
Heavy metals (as Pb): < 0.002%
Chloride (Cl): < 0.01%
Organic Volatile Impurities: To pass test
Insoluble Matter: < 0.005%
Solubility 50 mg/ml (5%) H_2O: Clear, colorless to faint yellow solution.

SODIUM TETRABORATE CRYSTALS ACS  
Product# 75800

Synonyms: Sodium borate decahydrate; borax; sodium pyroborate
CAS No: 1303-96-4
Formula: Na_2B_4O_7 * 10H_2O

F.W.: 381.37

Assay: 99.5 - 105.0 %
ph of a 0.01 M solution: 9.15 - 9.20 @ 25 deg. C
Insoluble matter: 0.005 % maximum
Chloride (Cl): 0.001 % maximum
Phosphate (PO_4): 0.001 % maximum
Sulfate (SO_4): 0.005 % maximum
Calcium (Ca): 0.005 % maximum
Heavy Metals (as Pb): 0.001 % maximum
Iron (Fe): 5 ppm maximum

SOLVENT RED 27  
Product# 75871

Synonyms: C.I. 26125; Oil Red O
CAS No: 1320-06-5
Formula: C_26H_34N_4O
**2.(4-SULFOPHENYLAZO)-1,8-DIHYDROXY-3,6-NAPTHALENE-DISULFONIC ACID, 3SODIUM SALT ACS**  
*SPADNS*  
Product# 75900

Synonyms: 4,5-Dihydroxy-3-(4-Sulfophenylazo)-2,7-naphthalenedisulfonic Acid trisodium salt; SPADNS; p-Sulfophenylazochromotropic Acid trisodium salt  
CAS No.: 23647-14-5  
Formula: C_{16}H_{9}N_{2}Na_{3}O_{11}S_{3}  
F.W.: 570.42

Appearance: Dark-greenish-brown Powder  
Identification: Conforms to structure and standard  
Dye Content: > 95.0%  
Melting Point: 120°C (dec.)  
Spectroscopy: 518 (359) nm in Toluene  
Solubility: 4mg/ml (water)

---

**STARCH SOLUBLE ACS**  
Product# 76190

Synonyms: High-polymeric carbohydrate material derived from potatoes.  
CAS No.: 9005-84-9  
Formula: (C_{6}H_{10}O_{5})_{n}

Appearance: White to Off-White Powder  
Solubility: Passes Test  
pH of 2% Solution at 25°C: 5.0 - 7.0  
Residue after Ignition: ≤ 0.4%  
Sensitivity: Passes Test  
Melting Point: 256-258°C

---

**STANNIOUS CHLORIDE DIHYDRATE ACS**  
Product# 76150

Synonyms: Tin (II) Chloride Dihydrate; Stannochlor  
CAS No.: 10025-69-1  
Formula: SnCl_{2} * 2H_{2}O  
F.W.: 225.65

Appearance: Dark-grey powder, Light sensitive  
Identification: To pass test  
Assay: 95% Minimum  
Lambda Max: 575nm in Ethanol  
Solubility: Dark blue to dark purple Solution at 40mg plus 4.0 ml Of Chloroform

---

**STRONTIUM NITRATE ACS**  
Product# 76250

Synonyms: Strontium (II) Nitrate (1:2); nitric acid, strontium salt  
CAS No.: 10042-76-9  
Formula: Sr(NO_{3})_{2}  
F.W.: 309.50

Assay: 98.0 - 103.0 %  
Solubility in hydrochloric acid: Passes Test  
Sulfate (SO_{4}): Passes Test  
Sodium (Na): 0.01 % maximum  
Potassium (K): 0.005 % maximum  
Calcium (Ca): 0.005 % maximum  
Iron (Fe): 0.003 % maximum  
Lead (Pb): 0.01 % maximum  
Barium (Ba): 0.05 % maximum  
Calcium (Ca): 0.05 % maximum  
Magnesium (Mg): 2 ppm maximum  
Heavy Metals (as Pb): 5 ppm maximum  
Iron (Fe): 5 ppm maximum

---

Phone: 1-732-886-3100  
Fax: 1-732-886-3688  
Email: dudley@dudley-chem.com  

DUDLEY CHEMICAL

**SUCCINIC ACID NF/ACS**

Product# 76300

Synonyms: Butanedioic acid; amber acid, Bernsteinäsäre; Ethylene Succinic acid; Ethylene dicarboxylic acid

CAS No: 110-15-6

Formula: HOOCCH$_2$CH$_2$COOH

F.W.: 118.09

Appearance: White crystals and/or powder

Assay: 99.0 % minimum

Melting Point: 185.0 – 191.0 deg. C

Insoluble matter: 0.010 % maximum

Residue on ignition: 0.020 % maximum

Solubility (10g/150ml): Clear and complete

Chloride (Cl): 0.001 % maximum

Phosphate (PO$_4$): 0.001 % maximum

Sulfate (SO$_4$): 0.003 % maximum

Nitrogen Compounds (as N): 0.001 % maximum

Iron (Fe): 5 ppm maximum

Heavy Metals (as Pb): 5 ppm maximum

**SUCCINIC ACID DISODIUM SALT 6HY**

(SODIUM SUCCINATE)

Product# 76303

Synonyms: Butanedioic acid disodium salt; succinic acid disodium salt; Disodium succinate; sodium succinate hexahydrate

CAS No: 6106-21-4

Formula: C$_4$H$_4$Na$_2$O$_4$ * 6H$_2$O

F.W.: 270.15

Appearance: White crystalline powder

Identification: To Pass Test

Assay: 97.0 - 102.0 %

**SUCCINIC ACID DISODIUM SALT 99%**

Product# 76304

Synonyms: Butanedioic acid disodium salt; succinic acid disodium salt; Disodium succinate; Sodium succinate anhydrous

CAS No: 150-90-3

Formula: C$_4$H$_4$Na$_2$O$_4$

F.W.: 162.05

Appearance: White crystalline powder

Assay(on dry weight basis): 99.0 % minimum

Heavy Metals: 10 ppm maximum

Loss on drying: 1.0 % maximum

**SUCCINIC ANHYDRIDE 99%**

Product# 76306

Synonyms: Dihydro-2,5-furandione

CAS No: 108-30-5

Formula: C$_4$H$_4$O$_3$

F.W.: 100.07

Appearance: White flakes, chips, crystals and/or powder

Identification: Conforms to structure

Melting Point: 117 - 121 deg. C

Residue on Ignition: 0.2 % maximum

Assay: 99.0 % minimum

Boiling Point: 261 Deg. C (760 mm Hg)

Sensitivity: Moisture sensitive

**SUDAN II C.I. 12140**

Product# 76356

Synonyms: C.I. 12140; 1-(2,4 Dimethylphenylazo)-2-naphthol; Solvent Orange 7; Sudan Orange RR

CAS No: 3118-97-6

Formula: C$_{18}$H$_{16}$N$_2$O

F.W.: 276.34

Appearance: Orange Powder

Lambda max: 493 nm

Melting Point: 156 - 158 deg. C

Dye Content: 85 % minimum

**SUDAN III CERTIFIED C.I. 26100**

Product# 76373

Synonyms: None known

Phone: 1-732-886-3100  Fax: 1-732-886-3688  Email: dudley@dudley-chem.com
CAS No: 85-86-9  
Formula: C₂₂H₁₆N₄O₄

F.W.: 352.40

Assay: 95% minimum
Appearance: Red-Brown Powder
Lambda max: 507 (354) nm (in Toluene)
Melting Point: 199 deg. C

SUDAN IV CERTIFIED  
Product# 76394

Synonyms: Scarlet Red; Solvent Red 24; C.I. 26105; Fat ponceau; Scarlet red; Lipid Crimson
CAS No: 85-83-6  
Formula: C₂₄H₂₀N₄O₄

F.W: 380.45

Appearance: Dark Red-Brown Powder
Identification: Conforms to structure and standard
Dye Content: > 80.0%
Melting Point: 199 C (dec.)
Spectroscopy: Peak 520 nm in Toluene
Solubility (1 mg/ml, CHCL3): Opaque dark red solution

SUDAN BLACK B CERTIFIED  
Product# 76399

Synonyms: Solvent Black 3; Fat Black HB; C.I. 26150;
CAS No: 4197-25-5  
Formula: C₂₉H₂₄N₆

F.W.: 456.55

Appearance: Very dark brown to black crystalline powder
Identification: Conforms to structure and standard
Dye Content: 100 ± 5%
Loss on drying: < 5.0%
Melting Point: 118 - 126 deg. C
Lambda max.: 598 (415)nm in ethanol

SUDAN ORANGE G C.I. 11920  
Product# 76410

Synonyms: C.I. 11920; 4-(Phenylazo)resorcinol; Solvent Orange 1
CAS No: 2051-85-6  
Formula: C₁₂H₁₀N₂O₃

F.W.: 214.22

Appearance: Red-Orange Powder
Solubility: Very slightly soluble in water
Melting Point: 143 - 146 deg. C

DUDLEY CHEMICAL

Lambda max: 400 nm in Methanol

SUDAN RED 7B C.I. 26050  
Product# 76422

Synonyms: C.I. 26050; Solvent Red 19; n-Ethyl-1-[4-(phenylazo)phenylazo]-2-naphthylamine
CAS No: 6368-72-5  
Formula: C₂₄H₂₁N₅

F.W.: 379.47

Appearance: Dark-Red Powder
Lambda Max: 533 (364) nm in Toluene
Melting Point: 130 deg. C
Solubility: Insoluble in water. Slightly soluble in ethanol And soluble in acetone and benzene

SULFANILIC ACID ANHYDROUS ACS  
Product# 76452

Synonyms: 4-Aminobenzenesulfonic Acid
CAS No.: 121-57-3  
Formula: C₆H₇NO₃S

F.W.: 173.19

Appearance: White to Off-white crystalline powder
Assay: 98.0 – 102.0%
Melting Point: 286 – 292 Deg. C
Residue after Ignition: < 0.01%
Chloride (Cl): < 0.002%
Nitrite (NO2): < 0.5 ppm
Sulfate (SO4): < 0.01%
Insoluble in Sodium Carbonate Solution: < 0.02%

SULFOBROMOPHTHALEIN SODIUM HYDRATE  
Product# 76473

Synonyms: Phenolphthalein, 4,5,6,7-Tetrabromo-3',3'' Disulfo-, Disodium Salt, (Sulfobromophthalein, sodium); Bromsulfalein; Bromthalein
CAS No.: 123359-42-2  
Formula: C₂₀H₈Br₄Na₂O₁₀S₂·xH₂O

F.W.: 838.03

Appearance: White Powder
Identification (IR): Conforms to structure
Loss on drying: < 7%
Lambda max.: 577 (366)nm in 0.1N sodium hydroxide
Sodium by ICP: 5.2 to 5.8%
Color of solution (5% in H₂O): Clear to slightly hazy, Colorless to pale yellow solution
Solubility: Soluble in water, Very slightly soluble in ethanol and acetone
**5-SULFOSALICYLIC ACID DIHYDRATE ACS**  Product# 76550

Synonyms: Benzoic acid, 2-hydroxy-5-sulfo-, dihydrate; Salicylsulfonic Acid; 3-Carboxy-4-Hydroxybenzene sulfonic acid  
CAS No: 5965-83-3  
Formula: HOC₆H₃(COOH)SO₃H * 2H₂O  

Appearance: White crystalline powder  
Assay: 99.0 – 101.0 %  
Water: 16% maximum  
Insoluble matter: 0.02 % maximum  
Residue after ignition: 0.1 % maximum  
Chloride (Cl): 0.001 % maximum  
Salicylic acid: 0.04 % maximum  
Sulfate (SO₄): 0.02 % maximum  
Iron (Fe): 0.001 % maximum

**TANNIC ACID ACS**  Product# 77900

Synonyms: Gallotannin, Tannin  
CAS No: 1401-55-4  
Formula: C₇₆H₅₂O₄₆  

Appearance: Light tan to brown powder  
Identification A,B: To pass Test  
Assay: ~ 86%  
Melting Point: 218 Deg. C  
Loss on drying at 105 Deg. C: <12.0% maximum  
Residue after ignition: <0.5% maximum  
Heavy metals (as Pb): <0.003% maximum  
Zinc (Zn): <3 ppm  
Sugars, dextrin test: To pass test  
Resinous substances: No turbidity produced  
Organic Volatile Substances: To pass test

**TETRABUTYL AMMONIUM BROMIDE**  Product# 78009

Synonyms: Tetra-n-Butylammonium Bromide  
CAS No: 1643-19-2  
Formula: C₁₆H₃₆BrN  

Appearance: White fine crystalline powder  
Assay: 99% minimum  
Melting Point: 102-106 Deg. C  
Solubility (50 mg/ml in ethanol): Clear colorless solution  
Max. Absorbance(UV 10% aq. Solution): 10% in H₂O  
240 nm <0.040 A.U.  
250 nm <0.030 A.U.  
260 nm <0.020 A.U.  
500 nm <0.020 A.U.

**TETRADECYL TRIMETHYLAMMONIUM BROMIDE**  Product# 78014

Synonyms: MYTAB; Myristyltrimethylammonium Bromide; Trimethyl(tetradecyl)Ammonium Bromide  
CAS No: 1119-97-7  
Formula: C₁₇H₃₈BrN  

Appearance: White to off-white powder  
Assay (titration): 99.0% - 101.0%  
Melting Point: 245 - 250 Deg. C  
Free Amine: NMT 0.2%  
Total Amine HBr: NMT 0.5%  
Solubility: Clear to very slightly hazy, colorless to faint yellow solution at 100 mg/ml in water.

**TARTRAZINE C.I.19140**  Product# 78005

Synonyms: Acid Yellow 23 ; FD&C Yellow 5  
CAS No: 1934-21-0  
Formula: C₁₆H₁₂N₄O₅S₆Na₃  

Appearance: Orange powder  
Identification: Conforms to structure and standard  
Lambda max:425 nm (In Water)  
Dye content: > 80.0%  
Water-insoluble Matter: 0.20% maximum  
Subsidiary Dyes: 1.00% maximum  
Arsenic (mg/kg): 3.00 maximum  
Lead (mg/kg): 10.00 maximum  
Mercury (mg/kg): 1.00 maximum  
Cadmium (mg/kg): 1.00 maximum

**SODIUM TETRADECYL SULFATE**  Product# 78016

Synonyms: 7-Ethyl-2-Methyl-4-Hendecanol Sulfate Sodium Salt, Myrestyl Sulfate Sodium Salt; Niaproof 4; Sodium Myristyl Sulfate; Sodium tetradecyl Sulfate; STDS; Sulfuric Acid Monotetradecylester, sodium salt; Tetradecyl sodium sulfate; Tetradecyl Sulfate Sodium Salt.  
CAS No: 1191-50-0  
Formula: CH₃(CH₂)₁₃SO₃Na
**TETRACYLCYLAMMONIUM BROMIDE**  Product# 78023

Synonyms: None known  
CAS No.: 14866-33-2  
Formula: CH₃(CH₂)₇NBr  
F.W.: 546.79  
Appearance: White Powder or Flakes  
Assay: 97% minimum  
Melting Point: 95 °C to 98 °C  
Titration: 97.5% - 102.5% (with AgNO₃)

**3,3,5,5-TETRAMETHYLBENZIDINE**  Product# 78027

Synonyms: TMB  
CAS No.: 54827-17-7  
Formula: C₁₆H₂₀N₂  
F.W.: 240.35  
Appearance: White to off-white to cream crystalline powder  
Identification (IR): To pass test  
Assay (HPLC): 99.0% minimum  
Melting Point: 167 - 170 deg. C  
Loss on drying: < 0.5 %  
Residue on ignition: 0.2%  
Solubility (5% ethyl acetate): Clear to slightly hazy colorless to yellow to yellow-green or orange solution

**TETRAZOLIUM BLUE**  Product# 78030

Synonyms: Tetrazolium blue chloride; Dimethoxytetrazolium chloride; 3,3-(3,3-Dimethoxy-4,4-biphenylene)bis(2,5-diphenyl-2H-tetrazolium chloride; 3,3-Dianisole-4,4-bis(3,5-diphenyltetrazolium chloride)  
CAS No.: 1871-22-3  
Formula: C₁₈H₁₆BrN₅S  
F.W.: 727.66  
Appearance: Yellow microcrystalline powder  
Assay (HPLC): 95.0 % minimum  
Melting Point: 255 deg. C  
Lambda Max: 253 nm in Methanol

**TETRAZOLIUM PURPLE**  Product# 78039

Synonyms: 2,5-Diphenyl-3-(1-naphthyl)tetrazolium chloride  
CAS No.: 1719-71-7  
Formula: C₂₃H₁₇ClN₄  
F.W.: 384.86  
Appearance: Yellow to Yellow-Brown Powder  
Identification (IR): Conforms to structure  
Assay: 98 % minimum  
Solubility(1 mg/ml, MeOH): Clear light yellow to green yellow solution

**THIAZOLE PURPLE**  Product# 78050

Synonyms: 3-,3’-Diethylthiacarbocyanine iodide  
CAS No.: 905-97-5  
Formula: C₂₁H₂₁IN₂S₂  
F.W.: 492.44 g/mol  
Appearance: Grey to blue crystalline powder  
Assay(with AgNO₃ After O2 Combustion)(titration): 94.0 – 106.0%  
Melting Point: 268-270 °C

**THIAZOLYL BLUE TETRAZOLIUM BROMIDE (MTT)**  Product# 78096

Synonyms: 3-(4,5-Dimethylthiazol-2-yl)-2,5-Diphenyl-2H-Tetrazolium Bromide  
CAS No.: 298-93-1  
Formula: C₁₈H₁₆BrN₅S  
F.W.: 414.33  
Appearance: Yellow crystalline powder  
Assay: 98.0% minimum  
Melting Point: 190-210 deg. C  
Specific Extinction: E(1%/1cm)=min. 480 (at 243nm in water)  
Maximum Absorption(in water): 239.0 – 247.0 nm  
Solubility (5mg/ml, H₂O): Clear to very slightly hazy, Yellow to bright yellow solution
THIOFLAVIN T  
**Product# 78130**  
**Synonyms:** Basic Yellow 1; C.I. 49005; Thioflavine TCN; Primoflavine T; Rhodoline Yellow 6G; Setoflavain T; Tannoilavin T  
**CAS No:** 2390-54-7  
**Formula:** C₁₂H₁₀N₃SCl  
**F.W.:** 318.86  
**Appearance:** Yellow to gold-yellow to orange-brown powder  
**Identification:** Conforms to structure and standard  
**Dye content:** ~75 %  
**Solubility 1 mg/ml in Methanol:** Clear to very slightly hazy yellow to yellow-green solution  
**Lambda max:** 412nm ± 3nm in water

THIONIN CERTIFIED  
**Product# 78151**  
**Synonyms:** 3,7-Diaminophenothiazin-5-ium Chloride, Katalysin; Thionine  
**CAS No:** 78338-22-4  
**Formula:** C₁₂H₁₀N₃Cl  
**F.W.:** 263.60  
**Appearance:** Very Dark Green Powder  
**Lambda max:** 598 nm (In Water)

2-Thiophene Carboxylic Hydrazide  
**Product# 78161**  
**Synonyms:** 2-Thenoic hydrazide  
**CAS No:** 2361-27-5  
**Formula:** C₆H₆N₂O₅  
**F.W.:** 142.18  
**Appearance:** White to off-white crystalline Powder  
**Assay:** ~99.0 % minimum  
**Loss on drying:** 0.5% maximum  
**Melting Point:** 136 - 139 °C  
**FT-IR with standard:** Conforms  
**FT-NMR with standard:** Conforms  
**Solubility (200 mg/4ml of Ethanol):** Clear, colorless solution

THIOSEMICARBAZIDE  
**Product# 78169**  
**Synonyms:** Thiocarbamoyl hydrazide; Hydrazinecarbothioamide  
**CAS No:** 79-19-6  
**Formula:** C₆H₆N₃S  
**F.W.:** 91.14  
**Appearance:** White to off-white or tan crystalline powder  
**Identification:** Conforms to standard and structure

THORIN I  
**Product# 78174**  
**Synonyms:** APANS; 2-(3,6-disulfo-2-hydroxy-1-naphthylazo)benzene arsonic acid, disodium salt.  
**CAS No:** 132-33-2  
**Formula:** C₁₆H₁₄As₂Na₉S₈O₁₆  
**F.W.:** 576.29  
**Appearance:** Red to red-orange powder  
**Specific Extinction (1%/1cm):** 200 minimum  
**Maximum of Absorption In Water:** 481.0 – 489.0 nm  
**Solubility 10 mg/ml, H₂O:** Clear red solution  
**Suitable for determination of Barium:** Passes test

THYMINE, 99%  
**Product# 78176**  
**Synonyms:** 5-Methyluracil; 2,4-Dihydroxy-5-methylpyrimidine; 5-Methyl-2,4 (1H, 3H)-pyrimidinedione  
**CAS No:** 65-71-4  
**Formula:** C₅H₆N₂O₂  
**F.W.:** 126.11  
**Appearance:** White or Colorless crystals with characteristic odor.  
**Assay (Titration):** 99.0 - 101.0%  
**Identification (IR):** Conforms to standard

THYMOL NF  
**Product# 78178**  
**Synonyms:** 5-Methyl-2-isopropylphenol  
**CAS No:** 89-83-8  
**Formula:** 2-[(CH₃)₂CH]C₆H₅-5-(CH₃)OH  
**F.W.:** 150.22  
**Appearance:** White or Colorless crystals with characteristic odor.  
**Assay (Titration):** 99.0 - 101.0%  
**Identification (IR):** Conforms to standard
THYMOL BLUE FREE ACID ACS  
**Product# 78182**

**Synonyms:** TB; Thymolsulfonephthalein  
CAS No: 76-61-9  
Formula: C_{27}H_{30}O_{5}S  
F.W.: 466.60

**Appearance:** Dark-Green to brown to red-brown to purple crystalline powder  
**Clarity of solution:** To pass test  
**Melting Point:** 221 - 224 deg. C  
**Visual transition interval (acid range):** pH 1.2 (red) to pH 2.8 (yellow)  
**Visual transition interval (alkaline range):** pH 8.0 (yellow) to pH 9.2 (blue)  
**Loss on drying (at 110 Deg. C/1hr):** < 5.0%

THYMOL BLUE SODIUM SALT ACS  
**Product# 78186**

**Synonyms:** Thymol blue sodium salt; Thymol blue sodium  
CAS No: 62625-21-2  
Formula: C_{27}H_{29}O_{5}SNa  
F.W.: 488.58

**Appearance:** Orange-brown to brownish-black powder  
**Clarity of solution:** To pass test  
**Visual transition interval (acid range):** pH 1.2 (red) to pH 2.8 (yellow)  
**Visual transition interval (alkaline range):** pH 8.0 (yellow) to pH 9.2 (blue)  
**Loss on drying:** <1.0%

THYMOL IODIDE  
**Product# 78200**

**Synonyms:** Iodothymin; Dithymol Diiodide; 4,4'bis(iodoxy)-2,2'-dimethyl-5, 5'-bi(1-methylethyl)-1,1'biphenyl; bithymoliodioide; dithymoliodide; aristol; annidalin  
CAS No.: 552-22-7  
Formula: C_{20}H_{28}O_{2}I_{2}  
F.W.: 550.21

**Appearance:** Yellow colored powder with a slight aromatic odor  
**Assay (1):** >43%  
**Solubility:** To pass test  
**Identification:** To pass test

TIRON  
**Product# 78401**

**Synonyms:** 4,5-Dihydroxy-1,3-BenzeneDisulfonic Acid, Disodium Salt, HY  
CAS No.: 149-45-1  
Formula: C_{6}H_{6}Na_{2}O_{8}S_{2} * H_{2}O  
F.W.: 332.22

**Appearance:** White crystalline powder  
**Solubility(0.1 N NaOH):** Dark blue solution

DUDLEY CHEMICAL

**Phone:** 1-732-886-3100  
**Fax:** 1-732-886-3688  
**Email:** dudley@dudley-chem.com
Assay (TBAH - Titration): 97.0 % minimum
Loss on drying: 4.0 % maximum
Water (K.F.): 4.5 - 6.0 %
Chloride (Cl): < 0.5 %
Sulfate (SO4): < 1.0 %
Solubility (5% H2O): Clear

TITAN YELLOW

Synonyms: C.I. 19540; Clayton Yellow; Direct Yellow 9; Thiazol Yellow
CAS No:1829-00-1
Formula: C28H19N5O6S4Na2

F.W.: 695.73
Appearance: Rust colored Powder
Assay: 65.0% minimum
Loss on drying: 10.0% maximum
Clarity of Solution: Clear and complete
Solubility: Soluble in water, Slightly soluble in ethanol
Absorption max(in Water): 402- 407nm
Visual transition interval: From pH 11 (yellow) To pH 13 (red)

TOLUIDINE BLUE O CERTIFIED

Synonyms: Basic Blue 17; C.I. 52040; tolonium chloride; TBO
CAS No: 92-31-9
Formula: C15H16ClN3S

F.W.: 305.83
Appearance: Dark-green to black powder
Assay: 80.0 % minimum
Absorptivity 1%/1cm at Lambda max. 633.0 nm: > 1200
Loss on drying: 8.0 % maximum
Solubility (0.1% dist. Water): Clear blue solution

1,2,4-TRIAZOLE

Synonyms: Pyrrodiazole
CAS No: 288-88-0
Formula: C4H3N3

F.W.: 69.07
Appearance: White to light yellow crystalline powder or flakes
Assay: 99.0 % minimum
Water: 0.5% maximum
Melting Point: 118 – 122 Deg. C
Solubility (50 mg/ml, H2O): Clear, colorless to faint yellow solution

2,4,6-TRIBROMOPHENOL, 99%

Synonyms: Bromol; Tribromophenol
CAS No: 118-79-6
Formula: Br3C6H2OH

F.W.: 330.80
Appearance: White - off-white to pink flakes, chunks, briquettes or cubes
Assay (GLC): 99.5% minimum
Melting Point: 89 - 93°C
Water Content: 0.4% maximum
Bromine Content: 71.8% minimum
APHA (solution in MeOH): 50 maximum
APHA (solution in NaOH): 80 maximum

TRICHLOROACETIC ACID ACS

Synonyms: TCA; trichloroethanoic acid
CAS No.: 76-03-9
Formula: CCl3COOH

F.W.: 163.39
Appearance: White to colorless crystalline powder or crystals
Assay: 99.0% minimum
Residue after ignition: 0.03% maximum
Clarity of Solution: Clear colorless solution
Insoluble Matter: 0.01% maximum
Chloride (Cl): 0.002% maximum
Nitrate (NO3): 0.002% maximum
Phosphate (PO4): 5 ppm maximum
Sulfate (SO4): 0.02% maximum
Heavy Metals (as Pb): 0.002% maximum
Iron (Fe): 0.001% maximum
Substances darkened by Sulfuric Acid: To pass test
3,4,5-TRIMETHOXANYLANILINE, 98%  
Product# 80165

Synonyms: Benzenamine, 3,4,5-trimethoxy-
CAS No.: 24313-88-0
Formula: C9H13NO3

F.W.: 183.21

Appearance: Off-white crystalline powder
Assay: 98% minimum
Melting Point: 110 - 113°C

3,3,5,5-TETRAMETHYLBENZIDINE  
Product# 80170

Synonyms: TMB
CAS No.: 54827-17-7
Formula: C16H20N2

F.W.: 240.35

Appearance: White to off-white to cream crystalline powder
Identification (IR): To pass test
Assay (HPLC): 99.0% minimum
Melting Point: 167 - 170 deg. C
Loss on drying: < 0.5 %
Residue on ignition: 0.2%
Solubility (5% ethyl acetate): Clear to slightly hazy colorless to yellow to yellow-green or orange solution

2,3,5-TRIPHENYL-2H-TETRAZOLIUM CHLORIDE  
Product# 80202

Synonyms: Red Tetrazolium; TPTZ; TTC
CAS No: 298-96-4
Formula: C19H15ClN4

F.W.: 334.81

Appearance: White to off-white crystalline powder
Identification (I.R.): To pass test
Assay (by Titration): > 95.0%
Melting Point: 235 – 245 Deg. C (dec.)
Residue on ignition: 0.1% maximum
Solubility test: 1) 0.1 g/10 ml of Ethanol  1) Clear and complete
2) 50 mg/ml of water  2) Clear and complete
Sensitivity for reducing Sugars: To pass test

TRYPAN BLUE  
Product# 80251

Synonyms: Diamine blue 3B; Niagara Blue 3B; C.I. 23850; Direct Blue 14
CAS No.: 72-57-1
Formula: C34H24N6Na4O14S4

F.W.: 960.82

Appearance: Dark greenish-brown powder
Lambda max.: 607 nm in methanol  588 nm in water
Dye content: 25% - 80%
Melting Point: >300° C
Loss on drying: 8% maximum
Solubility (1 mg/ml H2O): Clear to opaque dark blue solution

TU-J PASTE  
Product# 80280

Synonyms: None known
Formula: C34H24N6Na4O14S4
F.W.: 379.84

Appearance: Bluish-black Paste
Solubility (1%) (in 10% H2SO4): Clear solution
Moisture: <50%
Absorption max. A1: 402nm - 407nm
Absorption max. A2: 570nm - 580nm
Absorptivity reading A1 (conc. = 2mg/lt): >0.130
Absorptivity reading A2 (conc. = 2 mg/lt): >0.240

TU-K PASTE  
Product# 80284

Synonyms: None known
Formula: C30H18ClN3O
F.W.: 351.79

Appearance: Bluish-black to very deep brown paste
Solubility (1%) (in 10% H2SO4): Clear solution
Moisture: <50%
Absorption maximum A1: 405nm - 410nm
Absorption maximum A2: 530nm - 540 nm
Absorptivity reading A1 (conc. = 4mg/lt): >0.470
Absorptivity reading A2 (conc. = 4mg/lt): >0.600

UREA CRYSTALS ACS  
Product# 83251

Synonyms: Carbamide resin; Carbamimidic acid; Carbonyl diamide; Carbonyldiamine; Isouren
CAS No: 57-13-6
Formula: NH2CONH2

F.W.: 60.06

Appearance: Fine white odorless crystals
Identification A&B: To pass test
Assay: 99.0 - 100.5 %
Melting Point: 132 - 135 deg. C
Alcohol Insoluble Substances: 0.01% maximum
Residue after ignition: 0.01 % maximum
Chloride (Cl): 0.01% maximum
Sulfate (SO4): 0.001 % maximum
Heavy Metals (as Pb): 0.001 % maximum
Iron (Fe): 0.001 % maximum
**VICTORIA BLUE B**

Product# 86795

Synonyms: Basic Blue 26; C.I. 44045; Fat Blue B
C.A.S.: 2580-56-5
Formula: C\textsubscript{33}H\textsubscript{32}ClIN

\[
\text{F.W.: } 506.10
\]

Appearance: Brownish powder with metallic luster to copper-colored chunks
Lambda Max: 599-605 nm in Ethanol
Loss on drying (60 deg. C): 5% maximum
Solubility: Slightly soluble in water and somewhat more soluble in the lower aliphatic alcohols.

---

**VICTORIA BLUE R**

Product# 86800

Synonyms: Basic Blue 11; C.I. 44040
CAS No: 2185-86-6
Formula: C\textsubscript{29}H\textsubscript{32}N\textsubscript{3}Cl

\[
\text{F.W.: } 458.04
\]

Appearance: Dark-Blue Powder
Lambda max: 615 nm (In Methanol)

---

**WATER BLUE 1**

Product# 92100

Synonyms: Acid Blue 22; C.I. 42755
CAS No: 28631-66-5
Formula: C\textsubscript{32}H\textsubscript{25}N\textsubscript{3}Na\textsubscript{2}O\textsubscript{9}S\textsubscript{3}

\[
\text{F.W.: } 737.73
\]

Appearance: Brownish-purple crystalline powder With metallic luster
Solubility (in water): Soluble
Lambda max.: 594 – 610 nm in water

---

**WRIGHTS STAIN CERTIFIED**

Product# 92152

Synonyms: Eosin-Methylene Blue, Wright
CAS No: 68988-92-1

---

**XYLENE CYANOL FF C.I. 42135**

Product# 92496

Synonyms: Cyanol FF; Acid Blue 147
CAS No.: 2650-17-1
Formula: C\textsubscript{25}H\textsubscript{27}N\textsubscript{2}NaO\textsubscript{6}S\textsubscript{2}

\[
\text{F.W.: } 538.61
\]

Appearance: Green or dark green powder
Assay: 75 % minimum
Lambda max.: 615nm
Loss on drying @ 105 Deg.C: 10 % maximum
Solubility (1 mg/ml, H\textsubscript{2}O): Dark blue solution

---

**XYLENE CYANOL FF C.I. 43535**

Product# 92500

Synonyms: None Known
CAS No.: 4463-44-9
Formula: C\textsubscript{25}H\textsubscript{27}N\textsubscript{2}NaO\textsubscript{7}S\textsubscript{2}

\[
\text{F.W.: } 554.61
\]

Appearance: Dark blue to dark green powder
Assay (corrected for loss): 85% minimum
Loss on Drying: 10% maximum
Solubility: Soluble in Water

---

**XYLENOL BLUE INDICATOR GRADE**

Product# 93050

Synonyms: 4,4’-(3H-2,1-Benzoxathiol-3-ylidene)bis[2,5-dimethylphenol]
5,5- dioxide; p-Xylenolsulfonephthalein; 1,4-dimethyl-S-hydroxybenzenesulfonephthalein
CAS No.: 125-31-5
Formula: C\textsubscript{23}H\textsubscript{2}O\textsubscript{5}

\[
\text{F.W.: } 410.49
\]

Appearance: Dark-brown to purple powder
Melting Point: 212 °C (dec.)
Loss on drying at 110 °C(1hr): 10.0% maximum

---

**DUDLEY CHEMICAL**

Phone: 1-732-886-3100 Fax: 1-732-886-3688 Email: dudley@dudley-chem.com
**XYLENOL ORANGE TETRASODIUM SALT ACS**

Product# 93150

Synonyms: 3,3'-bis[N,N-di[Carboxymethyl]aminomethyl]o-cresolsulfonephthalene, sodium salt; Xylenol orange, indicator; Xylenol Orange, sodium salt; Tetrasodium CAS No: 36184-43-7

Formula: C_{21}H_{19}Na_{4}O_{12}Sn_2

F.W.: 782.56

Appearance: Dark red to dark brown crystalline powder

Melting Point: 195 °C

Loss on drying (at 110 °C/1hr): 10.0 % maximum

Clarity of solution(0.1 g/100 ml of water): Passes test

Suitability for zinc Titration: Passes Test

**XYLIDINE PONCEAU 2R**

Product# 93180

Synonyms: Acid Red 26; C.I. 16150; Ponceau red RR; Scarlet R;

CAS No: 3761-53-3

Formula: C_{18}H_{14}Na_{2}O_{5}S

F.W.: 480.4

Appearance: Red Powder

Lambda max.: 503nm in water

Dye content: ~70%

Solubility 1mg/ml, H2O: Clear red solution

**ZINC ACETATE DIHYDRATE ACS**

Product# 94250

Synonyms: Acetic acid, zinc salt, dihydrate; Zinc diacetate; Zinc acetate dihydrate

CAS No: 5970-45-6

Formula: (CH_{3}COO)_{2}Zn * 2H_{2}O

F.W.: 219.51

Appearance: Colorless or white crystals with faint Odor of Acetic Acid

Assay: 98.0 – 101.0 %

pH of a 5% solution: 6.0 - 7.0 @ 25°C

Insoluble matter: 0.005 % maximum

Chloride (Cl): 5 ppm maximum

Sulfate (SO4): 0.005 % maximum

Calcium (Ca): 0.005 % maximum

Magnesium (Mg): 0.005 % maximum

**ZINC CARBONATE**

Product# 96270

Synonyms: Zinc Carbonate(1:1); Zinc Monocarbonate; Carbonic acid, zinc salt

CAS No.: 3486-35-9

Formula: 2ZnCO_{3}.3Zn(OH)_{2}

F.W.: 324.15

Appearance: White, fine powder

Assay (as ZnO): 70.0% minimum

Residue on ignition: 72%

Loss on drying @ 105 deg. C.: 5%

Alkalinity as Na2SO4: 0.7% maximum

Sulfate (SO4): 0.01% maximum

Insoluble in H2SO4: 0.02% maximum

Chloride (Cl): 0.002% maximum

Nitrate (NO3): 0.005% maximum

Calcium (Ca): Actual Value Reported

Iron (Fe): 0.002% maximum

Lead (Pb): 0.005% maximum

Substances not precipitated By (NH4)2S: 0.40% maximum

**ZINC NITRATE HEXAHYDRATE**

Product# 96330

Synonyms: Nitric Acid, Zinc Salt, Hexahydrate

CAS No: 10196-18-6

Formula: Zn(NO_{3})_{2} * 6H_{2}O

F.W.: 297.47

Appearance: White crystalline powder and/or crystals

Assay: 99.0 – 101.0 %

Insoluble matter: 0.005 % maximum

Iron (Fe): 5 ppm maximum

Lead (Pb): 0.005 % maximum

Sulfate (SO4): 0.005 % maximum

Copper (Cu): 5 ppm maximum

Zinc (Zn): 50 ppm maximum

pH of a 5% solution @ 25 C: 3.5 - 6.0

**ZINC SULFATE 7HY ACS**

Product# 96350

Synonyms: Sulfuric acid, zinc salt(1:1) heptahydrate; zinc vitriol,
Heptahydrate; zinc sulfate, heptahydrate

CAS No: 7446-20-0
Formula: ZnSO₄·7H₂O

F.W.: 287.56

Appearance: Colorless efflorescent crystals
Assay: 99.0 – 103.0 %
pH of a 5% solution @ 25°C: 4.4 - 6.0
Insoluble matter: 0.01 % maximum
Chloride (Cl): 5 ppm maximum
Nitrate (NO₃): 0.002 % maximum
Ammonium (NH₄): 0.001 % maximum
Calcium (Ca): 0.005 % maximum
Iron (Fe): 0.001 % maximum
Lead (Pb): 0.003 % maximum
Magnesium (Mg): 0.005 % maximum
Manganese (Mn): 3 ppm maximum
Potassium (K): 0.01 % maximum
Sodium (Na): 0.05 % maximum

ZINC MONOSODIUM SALT ACS
Product# 96410

Synonyms: 2-[1-(2-Hydroxy-5-sulfophenyl)-3-phenyl-5- formazano] benzoic acid monosodium salt
CAS No.: 62625-22-3
Formula: C₂₀H₁₅N₄NaO₆S

F.W.: 462.41

Appearance: Maroon to purple powder
Loss on drying: 10.0 % maximum
Lambda max.: 490 – 498nm in 0.001N NaOH
Clarity of Solution: To pass test
Suitability for complexometric titration (Zn): To pass test

To Order, Contact Dudley@dudley-chem.com,
Call us in the US at 732-886-3100
Or Fax us at 732-886-3688
<table>
<thead>
<tr>
<th>Product</th>
<th>CAS#</th>
<th>Our Code #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminon ACS</td>
<td>[569-58-4]</td>
<td>02900</td>
</tr>
<tr>
<td>4-Aminoantipyrine ACS</td>
<td>[83-07-8]</td>
<td>03148</td>
</tr>
<tr>
<td>1-Amino-2-Naphthol-4-Sulfonic Acid ACS</td>
<td>[116-63-2]</td>
<td>03156</td>
</tr>
<tr>
<td>Ammonium Acetate Anhydrous ACS</td>
<td>[631-61-8]</td>
<td>03206</td>
</tr>
<tr>
<td>Ammonium Bromide ACS</td>
<td>[12124-97-9]</td>
<td>03210</td>
</tr>
<tr>
<td>Ammonium Chloride ACS</td>
<td>[12125-02-9]</td>
<td>03250</td>
</tr>
<tr>
<td>Ammonium Molybdate Tetrahydrate ACS</td>
<td>[12054-85-2]</td>
<td>03262</td>
</tr>
<tr>
<td>Ammonium Oxalate 1 Hydrate ACS</td>
<td>[6009-70-7]</td>
<td>03282</td>
</tr>
<tr>
<td>Ammonium Thiocyanate ACS</td>
<td>[1762-95-4]</td>
<td>03320</td>
</tr>
<tr>
<td>Antipyrine 99%</td>
<td>[60-80-0]</td>
<td>03500</td>
</tr>
<tr>
<td>Anthrone ACS</td>
<td>[90-44-8]</td>
<td>03751</td>
</tr>
<tr>
<td>Barium Carbonate ACS</td>
<td>[513-77-9]</td>
<td>05066</td>
</tr>
<tr>
<td>Barium Chloride 2HY ACS</td>
<td>[10326-27-9]</td>
<td>05071</td>
</tr>
<tr>
<td>Barium Nitrate ACS</td>
<td>[10035-06-0]</td>
<td>06131</td>
</tr>
<tr>
<td>Bathocuprione</td>
<td>[4733-39-5]</td>
<td>05200</td>
</tr>
<tr>
<td>Bathophenanthroline</td>
<td>[1662-01-7]</td>
<td>05230</td>
</tr>
<tr>
<td>Bismuth Nitrate ACS</td>
<td>[10035-06-0]</td>
<td>06131</td>
</tr>
<tr>
<td>Biuret</td>
<td>[108-19-0]</td>
<td>06381</td>
</tr>
<tr>
<td>Bromocresol Green Free Acid ACS</td>
<td>[76-60-8]</td>
<td>08142</td>
</tr>
<tr>
<td>Bromocresol Green Sodium Salt ACS</td>
<td>[62625-28-9]</td>
<td>08146</td>
</tr>
<tr>
<td>Bromocresol Purple Free Acid ACS</td>
<td>[115-40-2]</td>
<td>08152</td>
</tr>
<tr>
<td>Bromocresol Purple Sodium Salt ACS</td>
<td>[62625-30-3]</td>
<td>08156</td>
</tr>
<tr>
<td>Bromophenol Blue Free Acid ACS</td>
<td>[115-39-9]</td>
<td>08162</td>
</tr>
<tr>
<td>Bromophenol Blue Sodium Salt ACS</td>
<td>[62625-28-9]</td>
<td>08166</td>
</tr>
<tr>
<td>Bromothymol Blue Free Acid ACS</td>
<td>[76-59-2]</td>
<td>08172</td>
</tr>
<tr>
<td>Bromothymol Blue Sodium Salt ACS</td>
<td>[34722-90-2]</td>
<td>08176</td>
</tr>
<tr>
<td>1-Butanesulfonic Acid Sodium Salt Anhydrous HPLC</td>
<td>[2386-54-1]</td>
<td>08902</td>
</tr>
<tr>
<td>Calcium Acetate 1 Hydrate ACS</td>
<td>[5743-26-0]</td>
<td>09116</td>
</tr>
<tr>
<td>Calcium Carbonate ACS</td>
<td>[471-34-1]</td>
<td>09130</td>
</tr>
<tr>
<td>Calcium Sulfate 2HY ACS</td>
<td>[10101-41-4]</td>
<td>09230</td>
</tr>
<tr>
<td>Chromotropic Acid Disodium Salt ACS</td>
<td>[5808-22-0]</td>
<td>10600</td>
</tr>
<tr>
<td>Congo Red</td>
<td>[573-58-0]</td>
<td>11100</td>
</tr>
<tr>
<td>α-Cresolphthalein Complexone ACS</td>
<td>[2411-89-4]</td>
<td>12102</td>
</tr>
<tr>
<td>1-Decanesulfonic Acid Sodium Salt Anhydrous HPLC</td>
<td>[13419-61-9]</td>
<td>12801</td>
</tr>
<tr>
<td>2,7-Dichlorofluorescein ACS</td>
<td>[76-54-0]</td>
<td>14104</td>
</tr>
<tr>
<td>2,6-Dichloroindophenol sodium Salt ACS</td>
<td>[620-45-1]</td>
<td>14130</td>
</tr>
<tr>
<td>p-Dimethylaminobenzaldehyde ACS</td>
<td>[100-10-7]</td>
<td>14191</td>
</tr>
<tr>
<td>Dimethylglyoxime ACS</td>
<td>[95-45-4]</td>
<td>14211</td>
</tr>
<tr>
<td>Dimethylglyoxime Disodium Salt</td>
<td>[75006-64-3]</td>
<td>14214</td>
</tr>
<tr>
<td>Dimidium Bromide</td>
<td>[518-67-2]</td>
<td>14222</td>
</tr>
<tr>
<td>Diphenylcarbazone</td>
<td>[538-62-5]</td>
<td>14239</td>
</tr>
<tr>
<td>Diphenylcarbazone</td>
<td>[10329-15-4]</td>
<td>14241</td>
</tr>
<tr>
<td>1,5-Diphenylcarboxydrazide ACS</td>
<td>[140-22-7]</td>
<td>14271</td>
</tr>
<tr>
<td>2,5-Diphenyloxazole</td>
<td>[92-71-7]</td>
<td>14290</td>
</tr>
<tr>
<td>2,2'-Dipyridyl ACS</td>
<td>[366-18-7]</td>
<td>14301</td>
</tr>
<tr>
<td>5,5'-Dithiobis(2-nitrobenzoic acid)</td>
<td>[69-78-3]</td>
<td>14502</td>
</tr>
<tr>
<td>Product</td>
<td>CAS#</td>
<td>Our Code #</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>Dithizone ACS</td>
<td>60-10-6</td>
<td>14800</td>
</tr>
<tr>
<td>1-Dodecanesulfonic Acid Sodium Salt  HPLC</td>
<td>2386-53-0</td>
<td>18002</td>
</tr>
<tr>
<td>Eosin Y Disodium Salt ACS</td>
<td>17372-87-1</td>
<td>19253</td>
</tr>
<tr>
<td>Eriochrome Black T ACS</td>
<td>1787-61-7</td>
<td>20300</td>
</tr>
<tr>
<td>Ethidium Bromide</td>
<td>1239-45-8</td>
<td>20420</td>
</tr>
<tr>
<td>EDTA Free Acid CAS</td>
<td>60-00-4</td>
<td>20432</td>
</tr>
<tr>
<td>EDTA Dipotassium Dihydrate</td>
<td>251002-12-9</td>
<td>20439</td>
</tr>
<tr>
<td>EDTA Disodium Salt 2HY ACS</td>
<td>6381-92-6</td>
<td>20442</td>
</tr>
<tr>
<td>Ferrous Sulfate 7 HY ACS</td>
<td>7782-63-0</td>
<td>22220</td>
</tr>
<tr>
<td>Gallic Acid Anhydrous ACS</td>
<td>149-91-7</td>
<td>25799</td>
</tr>
<tr>
<td>Gallic Acid 1 Hydrate ACS</td>
<td>5995-86-8</td>
<td>25801</td>
</tr>
<tr>
<td>1-Heptanesulfonic Acid Sodium Salt  HPLC</td>
<td>22767-50-6</td>
<td>30150</td>
</tr>
<tr>
<td>1-Heptanesulfonic Acid Sodium Salt 1Hydrate HPLC</td>
<td>207300-90-1</td>
<td>30154</td>
</tr>
<tr>
<td>1-Hexanesulfonic Acid Sodium Anhydr sust</td>
<td>2832-45-3</td>
<td>30180</td>
</tr>
<tr>
<td>1-Hexanesulfonic Acid Sodium Salt 1Hydrate HPLC</td>
<td>207300-91-2</td>
<td>30184</td>
</tr>
<tr>
<td>Hydroxy Naphthol Blue ACS</td>
<td>165660-27-5</td>
<td>32091</td>
</tr>
<tr>
<td>8-Hydroxyquinolone ACS</td>
<td>148-24-3</td>
<td>32141</td>
</tr>
<tr>
<td>Imidazole ACS</td>
<td>288-32-4</td>
<td>33800</td>
</tr>
<tr>
<td>Indigo Carmine ACS</td>
<td>860-22-0</td>
<td>34001</td>
</tr>
<tr>
<td>p-Iodonitrotetrazolium Violet (INT)</td>
<td>146-68-9</td>
<td>35198</td>
</tr>
<tr>
<td>Lead Acetate 3 Hydrate ACS</td>
<td>598-63-0</td>
<td>46100</td>
</tr>
<tr>
<td>Lead Carbonate ACS</td>
<td>598-63-0</td>
<td>46120</td>
</tr>
<tr>
<td>Lead Chloride</td>
<td>7758-95-4</td>
<td>46140</td>
</tr>
<tr>
<td>Lead Nitrate ACS</td>
<td>10099-74-8</td>
<td>46160</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product</th>
<th>CAS#</th>
<th>Our Code #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Subacetate ACS</td>
<td>1335-32-6</td>
<td>46168</td>
</tr>
<tr>
<td>Lead Sulfate</td>
<td>7446-14-2</td>
<td>46170</td>
</tr>
<tr>
<td>Luminol</td>
<td>521-31-3</td>
<td>46311</td>
</tr>
<tr>
<td>Luminol Sodium Salt Hemihydrate</td>
<td>206658-90-4</td>
<td>46316</td>
</tr>
<tr>
<td>Magnesium Chloride 6 Hydrate ACS</td>
<td>7791-18-6</td>
<td>49104</td>
</tr>
<tr>
<td>Magnesium Nitrate ACS</td>
<td>13446-18-9</td>
<td>49130</td>
</tr>
<tr>
<td>Manganese Sulfate 1 Hydrate ACS</td>
<td>10034-96-5</td>
<td>49270</td>
</tr>
<tr>
<td>Mercuric Acetate ACS</td>
<td>1600-27-7</td>
<td>50120</td>
</tr>
<tr>
<td>Mercuric Bromide ACS</td>
<td>7789-47-1</td>
<td>50123</td>
</tr>
<tr>
<td>Mercuric Chloride ACS</td>
<td>7487-94-7</td>
<td>50131</td>
</tr>
<tr>
<td>Mercuric Iodide ACS</td>
<td>7774-29-0</td>
<td>50150</td>
</tr>
<tr>
<td>Mercuric Nitrate ACS</td>
<td>7783-34-8</td>
<td>50161</td>
</tr>
<tr>
<td>Mercuric Oxide Red ACS</td>
<td>21908-53-2</td>
<td>50164</td>
</tr>
<tr>
<td>Mercuric Oxide Yellow ACS</td>
<td>21908-53-2</td>
<td>50167</td>
</tr>
<tr>
<td>Mercuric Sulfate ACS</td>
<td>7783-35-9</td>
<td>50170</td>
</tr>
<tr>
<td>Mercuric Thiocyanate</td>
<td>592-85-8</td>
<td>50190</td>
</tr>
<tr>
<td>Mercurious Chloride ACS</td>
<td>10112-91-1</td>
<td>50196</td>
</tr>
<tr>
<td>Mercurious Nitrate 2 hydrate ACS</td>
<td>14836-60-3</td>
<td>50200</td>
</tr>
<tr>
<td>Methyl Orange ACS</td>
<td>547-58-0</td>
<td>50341</td>
</tr>
<tr>
<td>Methyl Red Free Acid ACS</td>
<td>493-52-7</td>
<td>50362</td>
</tr>
<tr>
<td>Methyl Red HCL ACS</td>
<td>63451-28-5</td>
<td>50364</td>
</tr>
<tr>
<td>Methyl Red Sodium Salt ACS</td>
<td>845-10-3</td>
<td>50368</td>
</tr>
<tr>
<td>Methylthymol Blue Sodium Salt ACS</td>
<td>1945-77-3</td>
<td>50390</td>
</tr>
<tr>
<td>Molybdic Acid ACS</td>
<td>7782-91-4</td>
<td>51501</td>
</tr>
<tr>
<td>Morin Hydrate</td>
<td>480-16-0</td>
<td>51601</td>
</tr>
<tr>
<td>Product</td>
<td>CAS#</td>
<td>Our Code #</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>Murexide ACS</td>
<td>[3051-09-0]</td>
<td>52151</td>
</tr>
<tr>
<td>Naphthol Green B ACS</td>
<td>[9381-50-1]</td>
<td>53361</td>
</tr>
<tr>
<td>N-(1-Naphthyl)methyleneamine Dihydrochloride ACS</td>
<td>[1465-25-4]</td>
<td>53368</td>
</tr>
<tr>
<td>Neocuprone 99%</td>
<td>[484-11-7]</td>
<td>53501</td>
</tr>
<tr>
<td>Neocuprone Hydrochloride hydrate</td>
<td>[7296-20-0]</td>
<td>53505</td>
</tr>
<tr>
<td>Neotetrazolium Chloride</td>
<td>[298-83-9]</td>
<td>53700</td>
</tr>
<tr>
<td>Neutral Red ACS</td>
<td>[553-24-2]</td>
<td>54150</td>
</tr>
<tr>
<td>Ninhydrin ACS</td>
<td>[485-47-2]</td>
<td>54281</td>
</tr>
<tr>
<td>Nitro Blue Tetrazolium Chloride (NBT)</td>
<td>[798-83-9]</td>
<td>54471</td>
</tr>
<tr>
<td>1-Nonanesulfonic Acid Sodium Salt Anhydrous HPLC</td>
<td>[35192-74-6]</td>
<td>55260</td>
</tr>
<tr>
<td>1-Octanesulfonic Acid Sodium Anhydrous HPLC</td>
<td>[5324-84-5]</td>
<td>57150</td>
</tr>
<tr>
<td>1-Octanesulfonic Acid Sodium Salt 1 Hydrate HPLC</td>
<td>[207596-29-0]</td>
<td>57154</td>
</tr>
<tr>
<td>P.A.R. Free Acid ACS</td>
<td>[1141-59-9]</td>
<td>61179</td>
</tr>
<tr>
<td>P.A.R. Monosodium ACS</td>
<td>[16593-81-0]</td>
<td>61182</td>
</tr>
<tr>
<td>1-Pentanesulfonic Acid Sodium Anhydrous HPLC</td>
<td>[22767-49-3]</td>
<td>62150</td>
</tr>
<tr>
<td>1-Pentanesulfonic Acid Sodium 1HY HPLC</td>
<td>[207605-40-1]</td>
<td>62155</td>
</tr>
<tr>
<td>1,10-Phenanthrol ine Anhydrous</td>
<td>[66-71-7]</td>
<td>62238</td>
</tr>
<tr>
<td>1,10-Phenanthrol ine 1 Hydrate HCS</td>
<td>[5144-89-8]</td>
<td>62242</td>
</tr>
<tr>
<td>1,10-Phenanthrol ine 1 HCL Monohydrate</td>
<td>[3829-86-5]</td>
<td>62246</td>
</tr>
<tr>
<td>Phenol Red Free Acid ACS</td>
<td>[143-74-8]</td>
<td>62272</td>
</tr>
<tr>
<td>Phenol Red Sodium Salt ACS</td>
<td>[34487-61-1]</td>
<td>62277</td>
</tr>
<tr>
<td>Phenolphthalein White ACS</td>
<td>[77-09-8]</td>
<td>62300</td>
</tr>
<tr>
<td>Potassium Acetate ACS</td>
<td>[127-08-2]</td>
<td>63560</td>
</tr>
<tr>
<td>Potassium Bromide ACS</td>
<td>[7758-02-3]</td>
<td>63600</td>
</tr>
<tr>
<td>Potassium Nitrate ACS</td>
<td>[7757-79-1]</td>
<td>63770</td>
</tr>
<tr>
<td>Potassium Oxalate 1 HY ACS</td>
<td>[6487-48-5]</td>
<td>63797</td>
</tr>
<tr>
<td>Potassium Periodate Meta ACS</td>
<td>[5332-20-0]</td>
<td>63800</td>
</tr>
<tr>
<td>Potassium Thiocyanate ACS</td>
<td>[333-20-0]</td>
<td>63812</td>
</tr>
<tr>
<td>1-Propanesulfonic Acid Sodium Salt 1HY HPLC</td>
<td>[304672-01-3]</td>
<td>63913</td>
</tr>
<tr>
<td>2-Propanesulfonic Acid Sodium Salt 1 HY HPLC</td>
<td>[53399-58-6]</td>
<td>63915</td>
</tr>
<tr>
<td>Pyrogallol ACS</td>
<td>[87-66-1]</td>
<td>64847</td>
</tr>
<tr>
<td>Reinacke Salt ACS</td>
<td>[13573-16-5]</td>
<td>69091</td>
</tr>
<tr>
<td>Salicylic Acid ACS</td>
<td>[69-72-7]</td>
<td>73500</td>
</tr>
<tr>
<td>Sodium Acetate 3 Hydrate ACS</td>
<td>[6131-90-4]</td>
<td>74210</td>
</tr>
<tr>
<td>Sodium Bismuthate ACS</td>
<td>[12232-99-4]</td>
<td>74242</td>
</tr>
<tr>
<td>Sodium Bromide ACS</td>
<td>[7647-15-6]</td>
<td>74290</td>
</tr>
<tr>
<td>Sodium Carbonate 1 Hydrate ACS</td>
<td>[5968-11-6]</td>
<td>74300</td>
</tr>
<tr>
<td>Sodium Cobaltnitrite ACS</td>
<td>[13600-98-1]</td>
<td>74305</td>
</tr>
<tr>
<td>Sodium Diethylthiocarbamate 3 Hydrate ACS</td>
<td>[20624-25-3]</td>
<td>74312</td>
</tr>
<tr>
<td>Sodium Diphenylaminesulfonate ACS</td>
<td>[6152-67-6]</td>
<td>74340</td>
</tr>
<tr>
<td>Sodium Decyl Sulfate HPLC</td>
<td>[142-87-0]</td>
<td>74391</td>
</tr>
<tr>
<td>Sodium Dodecyl Sulfate</td>
<td>[151-21-3]</td>
<td>74440</td>
</tr>
<tr>
<td>Sodium Molybdate Dihydrate ACS</td>
<td>[10102-40-6]</td>
<td>74458</td>
</tr>
<tr>
<td>Sodium Nitrate ACS</td>
<td>[7631-99-4]</td>
<td>74498</td>
</tr>
<tr>
<td>Sodium Nitrite ACS</td>
<td>[7632-00-0]</td>
<td>74530</td>
</tr>
<tr>
<td>Product</td>
<td>CAS#</td>
<td>Our Code #</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>Sodium Nitroferricyanide dihydrate ACS</td>
<td>[13755-38-9]</td>
<td>74561</td>
</tr>
<tr>
<td>Sodium Octyl Sulfate HPLC</td>
<td>[142-31-4]</td>
<td>74575</td>
</tr>
<tr>
<td>Sodium Oxalate ACS</td>
<td>[62-76-0]</td>
<td>74583</td>
</tr>
<tr>
<td>Sodium Periodate Meta ACS</td>
<td>[7790-28-5]</td>
<td>74590</td>
</tr>
<tr>
<td>Sodium Tetraborate 10 Hydrate ACS</td>
<td>[1303-96-4]</td>
<td>75800</td>
</tr>
<tr>
<td>Sodium Thiocyanate ACS</td>
<td>[540-72-7]</td>
<td>75825</td>
</tr>
<tr>
<td>Sodium Tungstate 2 Hydrate AC</td>
<td>[10213-10-2]</td>
<td>75851</td>
</tr>
<tr>
<td>SPADNS ACS</td>
<td>[23647-14-5]</td>
<td>75900</td>
</tr>
<tr>
<td>Stannous Chloride 2 Hydrate AC</td>
<td>[10025-69-1]</td>
<td>76150</td>
</tr>
<tr>
<td>Strontium chloride 6 Hydrate ACS</td>
<td>[10025-70-4]</td>
<td>76220</td>
</tr>
<tr>
<td>Strontium Nitrate ACS</td>
<td>[10042-76-9]</td>
<td>76250</td>
</tr>
<tr>
<td>Succinic Acid ACS</td>
<td>[110-15-6]</td>
<td>76300</td>
</tr>
<tr>
<td>Sulfanilic Acid Anhydrous ACS</td>
<td>[121-57-3]</td>
<td>76452</td>
</tr>
<tr>
<td>Sulfobromophthalein Sodium</td>
<td>[123359-42-2]</td>
<td>76473</td>
</tr>
<tr>
<td>5-Sulfosalicylic Acid 2 Hydrate</td>
<td>[5965-83-3]</td>
<td>76550</td>
</tr>
<tr>
<td>Tannic Acid ACS</td>
<td>[1401-55-4]</td>
<td>77900</td>
</tr>
<tr>
<td>Tetraheptylammonium Bromide</td>
<td>[4368-51-8]</td>
<td>78020</td>
</tr>
<tr>
<td>Tetraoctylammonium bromide HPLC</td>
<td>[14866-33-2]</td>
<td>78023</td>
</tr>
<tr>
<td>3,3,5,5,-Tetramethylbenzidine</td>
<td>[54827-17-7]</td>
<td>78027</td>
</tr>
<tr>
<td>Tetrazolium Blue</td>
<td>[1871-22-3]</td>
<td>78030</td>
</tr>
<tr>
<td>Tetrazolium Violet</td>
<td>[1719-71-7]</td>
<td>78039</td>
</tr>
<tr>
<td>Thiazolyl Blue (MTT)</td>
<td>[298-93-1]</td>
<td>78096</td>
</tr>
<tr>
<td>Thiourea ACS</td>
<td>[62-56-6]</td>
<td>78173</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product</th>
<th>CAS#</th>
<th>Our Code #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thymol Blue Free Acid ACS</td>
<td>[76-61-9]</td>
<td>78182</td>
</tr>
<tr>
<td>Thymol Blue Sodium Salt ACS</td>
<td>[62625-21-2]</td>
<td>78186</td>
</tr>
<tr>
<td>Thymolphthalein ACS</td>
<td>[125-20-2]</td>
<td>78222</td>
</tr>
<tr>
<td>Trichloroacetic Acid ACS</td>
<td>[76-03-9]</td>
<td>80150</td>
</tr>
<tr>
<td>2,3,5-Triphenyltetrazolium Chloride</td>
<td>[298-96-4]</td>
<td>80202</td>
</tr>
<tr>
<td>Urea Crystals ACS</td>
<td>[57-13-6]</td>
<td>83251</td>
</tr>
<tr>
<td>Xylenol Orange Tetrazolium Salt ACS</td>
<td>[3618-43-7]</td>
<td>93150</td>
</tr>
<tr>
<td>Zinc Acetate Dihydrate ACS</td>
<td>[5970-45-6]</td>
<td>94250</td>
</tr>
<tr>
<td>Zinc Sulfate 7 Hydrate ACS</td>
<td>[7446-20-0]</td>
<td>96350</td>
</tr>
<tr>
<td>Zincon Monosodium Salt ACS</td>
<td>[62625-22-3]</td>
<td>96410</td>
</tr>
<tr>
<td>Product</td>
<td>CAS#</td>
<td>Our Code</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------</td>
<td>----------</td>
</tr>
<tr>
<td>Acid Blue 9</td>
<td>3844-45-9</td>
<td>00220</td>
</tr>
<tr>
<td>Acid blue 29</td>
<td>5850-35-1</td>
<td>00241</td>
</tr>
<tr>
<td>Acid Blue 40</td>
<td>6424-85-7</td>
<td>00282</td>
</tr>
<tr>
<td>Acid Blue 45</td>
<td>2861-02-1</td>
<td>00300</td>
</tr>
<tr>
<td>Acid Green 25</td>
<td>4403-90-1</td>
<td>00381</td>
</tr>
<tr>
<td>Acid Violet 17</td>
<td>4129-84-4</td>
<td>00522</td>
</tr>
<tr>
<td>Acridine Orange</td>
<td>10127-02-3</td>
<td>00910</td>
</tr>
<tr>
<td>Acridine Orange Base</td>
<td>494-38-2</td>
<td>00912</td>
</tr>
<tr>
<td>Acridine Orange HCl</td>
<td>65-61-2</td>
<td>00965</td>
</tr>
<tr>
<td>Acridine Yellow G</td>
<td>135-49-9</td>
<td>00920</td>
</tr>
<tr>
<td>Acriflavine HCl</td>
<td>8063-24-9</td>
<td>00965</td>
</tr>
<tr>
<td>Acriflavine Neutral</td>
<td>8048-52-0</td>
<td>00969</td>
</tr>
<tr>
<td>Alcian Blue 8GX Cert.</td>
<td>33864-99-2</td>
<td>02701</td>
</tr>
<tr>
<td>Alcian Yellow</td>
<td>61968-76-1</td>
<td>02704</td>
</tr>
<tr>
<td>Alizarin</td>
<td>72-48-0</td>
<td>02782</td>
</tr>
<tr>
<td>Alizarin Red S Cert.</td>
<td>130-22-3</td>
<td>02851</td>
</tr>
<tr>
<td>Alizarin Yellow GG</td>
<td>584-42-9</td>
<td>02861</td>
</tr>
<tr>
<td>Alizarin Yellow R</td>
<td>2243-76-7</td>
<td>02869</td>
</tr>
<tr>
<td>Alizarin Yellow R Sodium Salt</td>
<td>1718-34-9</td>
<td>02872</td>
</tr>
<tr>
<td>Alkali Blue 6B</td>
<td>30586-13-1</td>
<td>02882</td>
</tr>
<tr>
<td>Allura Red</td>
<td>25956-17-6</td>
<td>02890</td>
</tr>
<tr>
<td>Amaranth</td>
<td>915-67-3</td>
<td>03021</td>
</tr>
<tr>
<td>Amido Black 10B</td>
<td>1064-48-8</td>
<td>03112</td>
</tr>
<tr>
<td>Aniline Blue W/S Cert.</td>
<td>28631-66-5</td>
<td>03350</td>
</tr>
<tr>
<td>Auramine O Cert.</td>
<td>2465-27-2</td>
<td>04217</td>
</tr>
<tr>
<td>Azure A</td>
<td>531-53-3</td>
<td>04251</td>
</tr>
<tr>
<td>Product</td>
<td>CAS#</td>
<td>Our Code</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------</td>
<td>----------</td>
</tr>
<tr>
<td>Azure B (1)</td>
<td>531-55-5</td>
<td>04255</td>
</tr>
<tr>
<td>Azure C</td>
<td>531-57-7</td>
<td>04258</td>
</tr>
<tr>
<td>Azure II</td>
<td>37247-10-2</td>
<td>04263</td>
</tr>
<tr>
<td>Azure II Eosinate</td>
<td>53092-85-6</td>
<td>04267</td>
</tr>
<tr>
<td>Benzopurpurin 4B</td>
<td>992-59-6</td>
<td>05401</td>
</tr>
<tr>
<td>Biebrich Scarlet</td>
<td>4196-99-0</td>
<td>05750</td>
</tr>
<tr>
<td>Bismark Brown R</td>
<td>5421-66-9</td>
<td>05901</td>
</tr>
<tr>
<td>Bismark Brown Y Cert.</td>
<td>10114-58-6</td>
<td>05909</td>
</tr>
<tr>
<td>Brilliant Black BN</td>
<td>2519-30-4</td>
<td>08010</td>
</tr>
<tr>
<td>Brilliant Blue G250</td>
<td>6104-58-1</td>
<td>08061</td>
</tr>
<tr>
<td>Brilliant Blue R250</td>
<td>6104-59-2</td>
<td>08065</td>
</tr>
<tr>
<td>Brilliant Cresyl Blue Cert.</td>
<td>81029-05-2</td>
<td>08101</td>
</tr>
<tr>
<td>Brilliant Yellow</td>
<td>3051-11-4</td>
<td>08118</td>
</tr>
<tr>
<td>Brilliant Green Cert.</td>
<td>633-03-4</td>
<td>08121</td>
</tr>
<tr>
<td>Carmine (AlumLake) Cert.</td>
<td>1390-65-4</td>
<td>09450</td>
</tr>
<tr>
<td>Carminic Acid 50%</td>
<td>1260-17-9</td>
<td>09460</td>
</tr>
<tr>
<td>Carminic Acid 95%</td>
<td>1260-17-9</td>
<td>09464</td>
</tr>
<tr>
<td>Celestine Blue</td>
<td>1562-90-9</td>
<td>09500</td>
</tr>
<tr>
<td>Chicago Sky Blue 6B</td>
<td>2610-05-1</td>
<td>09601</td>
</tr>
<tr>
<td>Chlorazol Black E Cert.</td>
<td>1937-37-7</td>
<td>09656</td>
</tr>
<tr>
<td>Chocolate Brown HT</td>
<td>4553-89-3</td>
<td>09981</td>
</tr>
<tr>
<td>Chrome Azurol S</td>
<td>1667-99-8</td>
<td>10100</td>
</tr>
<tr>
<td>Chromotrope 2B</td>
<td>548-80-1</td>
<td>10396</td>
</tr>
<tr>
<td>Chromotrope 2R</td>
<td>4197-07-3</td>
<td>10401</td>
</tr>
<tr>
<td>Chromotrope FB</td>
<td>3567-69-9</td>
<td>10405</td>
</tr>
<tr>
<td>Chrysophenine</td>
<td>2870-32-8</td>
<td>10882</td>
</tr>
<tr>
<td>Product</td>
<td>CAS#</td>
<td>Our Code</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------</td>
<td>----------</td>
</tr>
<tr>
<td>Cresyl Violet Acetate Cert.</td>
<td>10510-54-0</td>
<td>12166</td>
</tr>
<tr>
<td>Crocein Orange G</td>
<td>1934-20-9</td>
<td>12168</td>
</tr>
<tr>
<td>Crocein Scarlet 7B</td>
<td>6226-76-2</td>
<td>12171</td>
</tr>
<tr>
<td>Crystal Scarlet</td>
<td>2766-77-0</td>
<td>12179</td>
</tr>
<tr>
<td>Crystal Violet Cert.</td>
<td>548-62-9</td>
<td>12186</td>
</tr>
<tr>
<td>Crystal Violet Lactone</td>
<td>1552-42-7</td>
<td>12201</td>
</tr>
<tr>
<td>Curcumin</td>
<td>458-37-7</td>
<td>12350</td>
</tr>
<tr>
<td>4,5-Dibromofluorescein</td>
<td>596-03-2</td>
<td>13280</td>
</tr>
<tr>
<td>Diethyl Safranine</td>
<td>4569-86-2</td>
<td>14154</td>
</tr>
<tr>
<td>Direct blue 71</td>
<td>4399-55-7</td>
<td>14351</td>
</tr>
<tr>
<td>Eosin B Spirit Soluble</td>
<td>56360-46-4</td>
<td>19246</td>
</tr>
<tr>
<td>Eosin B Cert.</td>
<td>548-24-3</td>
<td>19251</td>
</tr>
<tr>
<td>Eosin Y Cert.</td>
<td>17372-87-1</td>
<td>19256</td>
</tr>
<tr>
<td>Eosin Y Free Acid</td>
<td>15086-94-9</td>
<td>19258</td>
</tr>
<tr>
<td>Eriochrome Black T ACS</td>
<td>1787-61-7</td>
<td>20300</td>
</tr>
<tr>
<td>Eriochrome Blue Black B</td>
<td>3564-14-5</td>
<td>20318</td>
</tr>
<tr>
<td>Eriochrome Blue Black R</td>
<td>2583-85-4</td>
<td>20320</td>
</tr>
<tr>
<td>Eriochrome Cyanine R</td>
<td>3564-18-9</td>
<td>20323</td>
</tr>
<tr>
<td>Erioglaucine</td>
<td>3844-45-9</td>
<td>20336</td>
</tr>
<tr>
<td>Erythrosin B Spirit Soluble</td>
<td>15905-32-5</td>
<td>20350</td>
</tr>
<tr>
<td>Ethyl Eosin Cert.</td>
<td>6359-05-3</td>
<td>20455</td>
</tr>
<tr>
<td>Ethyl Violet</td>
<td>2390-59-2</td>
<td>20602</td>
</tr>
<tr>
<td>Evans Blue</td>
<td>314-13-6</td>
<td>20700</td>
</tr>
<tr>
<td>Fast Garnet GBC Base</td>
<td>97-56-3</td>
<td>21020</td>
</tr>
<tr>
<td>Fast Green F.C.F. Cert.</td>
<td>2353-45-9</td>
<td>21102</td>
</tr>
<tr>
<td>Fast Sulphon Black F</td>
<td>3682-47-1</td>
<td>21140</td>
</tr>
<tr>
<td>Product</td>
<td>CAS#</td>
<td>Our Code</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------</td>
<td>----------</td>
</tr>
<tr>
<td>Fat Brown RR</td>
<td>6416-57-5</td>
<td>21171</td>
</tr>
<tr>
<td>Flavianic Acid Hydrate</td>
<td>483-84-1</td>
<td>22236</td>
</tr>
<tr>
<td>Fluorescein USP</td>
<td>2321-07-5</td>
<td>23509</td>
</tr>
<tr>
<td>Fluorescein Free Acid USP</td>
<td>2321-07-5</td>
<td>23512</td>
</tr>
<tr>
<td>Fluorescein W/S</td>
<td>518-47-8</td>
<td>23517</td>
</tr>
<tr>
<td>Fuchsin Acid Calcium Salt Cert.</td>
<td>123334-10-1</td>
<td>24494</td>
</tr>
<tr>
<td>Fuchsin Acid Cert.</td>
<td>3244-88-0</td>
<td>24502</td>
</tr>
<tr>
<td>Fuchsin Basic Cert.</td>
<td>632-99-5</td>
<td>24502</td>
</tr>
<tr>
<td>Gallicyanine</td>
<td>1562-85-2</td>
<td>25850</td>
</tr>
<tr>
<td>Gentian Violet USP</td>
<td>548-62-9</td>
<td>26111</td>
</tr>
<tr>
<td>Giemsa Stain Cert.</td>
<td>51811-82-6</td>
<td>26201</td>
</tr>
<tr>
<td>Guinea Green B</td>
<td>4680-78-8</td>
<td>26350</td>
</tr>
<tr>
<td>Hematoxylin Cert.</td>
<td>517-28-2</td>
<td>30123</td>
</tr>
<tr>
<td>Indigo Carmine Cert.</td>
<td>860-22-0</td>
<td>34005</td>
</tr>
<tr>
<td>Indocyanine Green</td>
<td>3599-32-4</td>
<td>34015</td>
</tr>
<tr>
<td>Janus Green B Cert.</td>
<td>2869-83-2</td>
<td>40450</td>
</tr>
<tr>
<td>Jenner Stain Cert.</td>
<td>62851-42-7</td>
<td>40500</td>
</tr>
<tr>
<td>Lacmoid</td>
<td>42249-61-6</td>
<td>44100</td>
</tr>
<tr>
<td>Leishman Stain</td>
<td>12627-53-1</td>
<td>46191</td>
</tr>
<tr>
<td>Leuco Crystal Violet</td>
<td>603-48-5</td>
<td>46200</td>
</tr>
<tr>
<td>Light Green S.F. Cert.</td>
<td>5141-20-8</td>
<td>46211</td>
</tr>
<tr>
<td>Lissamine Green B</td>
<td>3087-16-9</td>
<td>46217</td>
</tr>
<tr>
<td>Luxol Fast Blue MBSN</td>
<td>1328-51-4</td>
<td>46357</td>
</tr>
<tr>
<td>Malachite Green HCl</td>
<td>123333-61-9</td>
<td>49158</td>
</tr>
<tr>
<td>Malachite Green Oxalate</td>
<td>2437-29-8</td>
<td>49161</td>
</tr>
<tr>
<td>Martius Yellow</td>
<td>605-69-6</td>
<td>49650</td>
</tr>
<tr>
<td>Product</td>
<td>CAS#</td>
<td>Our Code</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>---------</td>
<td>----------</td>
</tr>
<tr>
<td>May-Grunwald Stain</td>
<td>49751</td>
<td></td>
</tr>
<tr>
<td>Meldola's Blue</td>
<td>7057-57-0</td>
<td>50019</td>
</tr>
<tr>
<td>Metanil Yellow</td>
<td>587-98-4</td>
<td>50206</td>
</tr>
<tr>
<td>Methyl Blue</td>
<td>28983-56-4</td>
<td>50240</td>
</tr>
<tr>
<td>Methylene Blue Cert.</td>
<td>7220-79-3</td>
<td>50255</td>
</tr>
<tr>
<td>Methylene Blue USP</td>
<td>7220-79-3</td>
<td>50261</td>
</tr>
<tr>
<td>Methylene Green, Zinc Chloride Double Salt</td>
<td>2679-01-8</td>
<td>50271</td>
</tr>
<tr>
<td>Methylene Violet 3RAX</td>
<td>4569-86-2</td>
<td>50290</td>
</tr>
<tr>
<td>Methyl Green C.I.42585</td>
<td>14855-76-6</td>
<td>50317</td>
</tr>
<tr>
<td>Methyl Green C.I.42590 Cert.</td>
<td>7114-03-6</td>
<td>50320</td>
</tr>
<tr>
<td>Methyl Violet 2B Cert.</td>
<td>8004-87-3</td>
<td>50422</td>
</tr>
<tr>
<td>Neutral Red, 90%</td>
<td>553-24-2</td>
<td>54145</td>
</tr>
<tr>
<td>Neutral Red Cert.</td>
<td>553-24-2</td>
<td>54154</td>
</tr>
<tr>
<td>New Coccine</td>
<td>2611-82-7</td>
<td>54156</td>
</tr>
<tr>
<td>New Methylene Blue N</td>
<td>6586-05-6</td>
<td>54164</td>
</tr>
<tr>
<td>Nigrosin / Alcohol Soluble</td>
<td>11099-03-9</td>
<td>54188</td>
</tr>
<tr>
<td>Nigrosin W/S</td>
<td>8005-03-6</td>
<td>54191</td>
</tr>
<tr>
<td>Nile Blue Chloride</td>
<td>2381-85-3</td>
<td>54218</td>
</tr>
<tr>
<td>Nile Blue A Certified</td>
<td>3625-57-8</td>
<td>54221</td>
</tr>
<tr>
<td>Nile Red</td>
<td>7385-67-3</td>
<td>54227</td>
</tr>
<tr>
<td>Nuclear Fast Red</td>
<td>6409-77-4</td>
<td>55400</td>
</tr>
<tr>
<td>Oil Red O Cert.</td>
<td>1320-06-5</td>
<td>57376</td>
</tr>
<tr>
<td>Orange II Cert.</td>
<td>633-96-5</td>
<td>57603</td>
</tr>
<tr>
<td>Orange IV</td>
<td>554-73-4</td>
<td>57620</td>
</tr>
<tr>
<td>Orange G Cert.</td>
<td>1936-15-8</td>
<td>57644</td>
</tr>
<tr>
<td>Orcein Synthetic Cert.</td>
<td>1400-62-0</td>
<td>58100</td>
</tr>
<tr>
<td>Product</td>
<td>CAS#</td>
<td>Our Code</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------</td>
<td>----------</td>
</tr>
<tr>
<td>Pararosaniline Base</td>
<td>467-62-9</td>
<td>61185</td>
</tr>
<tr>
<td>Pararosaniline Acetate</td>
<td>6035-94-5</td>
<td>61188</td>
</tr>
<tr>
<td>Pararosaniline HCl Cert.</td>
<td>569-61-9</td>
<td>61192</td>
</tr>
<tr>
<td>Pararosaniline Special</td>
<td>6035-94-5</td>
<td>61194</td>
</tr>
<tr>
<td>For Flagella Staining</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Para Red</td>
<td>6410-10-2</td>
<td>61198</td>
</tr>
<tr>
<td>Patent Blue A</td>
<td>3486-30-4</td>
<td>61208</td>
</tr>
<tr>
<td>Patent Blue VF</td>
<td>129-17-9</td>
<td>61210</td>
</tr>
<tr>
<td>Patent Blue V</td>
<td>3536-49-0</td>
<td>61216</td>
</tr>
<tr>
<td>Phenosafranine</td>
<td>81-93-6</td>
<td>62320</td>
</tr>
<tr>
<td>4-Phenylazophenol</td>
<td>1689-82-3</td>
<td>62335</td>
</tr>
<tr>
<td>Phloxine B Cert.</td>
<td>18472-87-2</td>
<td>62400</td>
</tr>
<tr>
<td>Pinacyanol Chloride</td>
<td>2768-90-3</td>
<td>62445</td>
</tr>
<tr>
<td>Ponceau 4R</td>
<td>2611-82-7</td>
<td>63495</td>
</tr>
<tr>
<td>Ponceau S Electrophoresis</td>
<td>6226-79-5</td>
<td>63502</td>
</tr>
<tr>
<td>Ponceau SX</td>
<td>4548-53-2</td>
<td>63550</td>
</tr>
<tr>
<td>Primulin C.I. 49000</td>
<td>8064-60-6</td>
<td>63850</td>
</tr>
<tr>
<td>N’Propyl Red</td>
<td>2641-01-2</td>
<td>64200</td>
</tr>
<tr>
<td>Purpurin C.I. 58205</td>
<td>81-54-9</td>
<td>64701</td>
</tr>
<tr>
<td>Pyronin B Cert.</td>
<td>2150-48-3</td>
<td>64922</td>
</tr>
<tr>
<td>Pyronin V Cert.</td>
<td>92-32-0</td>
<td>64931</td>
</tr>
<tr>
<td>Quercetin Dihydrate</td>
<td>6151-25-3</td>
<td>68100</td>
</tr>
<tr>
<td>Quinoline Yellow W/S</td>
<td>8004-92-0</td>
<td>68301</td>
</tr>
<tr>
<td>Reactive Blue 2</td>
<td>12236-82-7</td>
<td>69015</td>
</tr>
<tr>
<td>Reactive Blue 4</td>
<td>13324-20-4</td>
<td>69020</td>
</tr>
<tr>
<td>Rhodamine B</td>
<td>81-88-9</td>
<td>70150</td>
</tr>
<tr>
<td>Product</td>
<td>CAS#</td>
<td>Our Code</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>Rhodamine B Base</td>
<td>509-34-2</td>
<td>70153</td>
</tr>
<tr>
<td>Rhodamine 6G</td>
<td>989-38-8</td>
<td>70165</td>
</tr>
<tr>
<td>Rose Bengal Cert.</td>
<td>632-69-9</td>
<td>70165</td>
</tr>
<tr>
<td>Rosolic Acid</td>
<td>603-45-2</td>
<td>72201</td>
</tr>
<tr>
<td>Saffron</td>
<td>42553-65-1</td>
<td>73110</td>
</tr>
<tr>
<td>Safranine O Cert.</td>
<td>477-73-6</td>
<td>73151</td>
</tr>
<tr>
<td>Sirius Red</td>
<td>2610-10-8</td>
<td>74190</td>
</tr>
<tr>
<td>Solvent Red 27</td>
<td>1320-06-5</td>
<td>75871</td>
</tr>
<tr>
<td>Stains-All</td>
<td>7423-31-6</td>
<td>76021</td>
</tr>
<tr>
<td>Sudan II</td>
<td>3118-97-6</td>
<td>76356</td>
</tr>
<tr>
<td>Sudan III Cert.</td>
<td>85-86-9</td>
<td>76373</td>
</tr>
<tr>
<td>Sudan IV Cert.</td>
<td>4197-25-5</td>
<td>76399</td>
</tr>
<tr>
<td>Sudan Black B Cert.</td>
<td>4197-25-5</td>
<td>76399</td>
</tr>
<tr>
<td>Sudan Orange G</td>
<td>2051-85-6</td>
<td>76410</td>
</tr>
<tr>
<td>Sudan Red 7B</td>
<td>6368-72-5</td>
<td>76422</td>
</tr>
<tr>
<td>Tartrazine</td>
<td>1934-21-0</td>
<td>78005</td>
</tr>
<tr>
<td>Thoiflavin T</td>
<td>2390-54-7</td>
<td>78130</td>
</tr>
<tr>
<td>Thionin Acetate Cert.</td>
<td>78338-22-4</td>
<td>78151</td>
</tr>
<tr>
<td>Titan Yellow</td>
<td>1829-00-1</td>
<td>78601</td>
</tr>
<tr>
<td>Toluidine Blue O Cert.</td>
<td>92-31-9</td>
<td>79150</td>
</tr>
<tr>
<td>Tropaeolin O</td>
<td>547-57-9</td>
<td>80027</td>
</tr>
<tr>
<td>Trypan Blue</td>
<td>72-57-1</td>
<td>80251</td>
</tr>
<tr>
<td>Victoria Blue B</td>
<td>2580-56-5</td>
<td>86795</td>
</tr>
<tr>
<td>Victoria Blue R</td>
<td>2185-86-6</td>
<td>86800</td>
</tr>
<tr>
<td>Water Blue 1</td>
<td>28631-66-5</td>
<td>92100</td>
</tr>
<tr>
<td>Product</td>
<td>CAS#</td>
<td>Our Code</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------</td>
<td>----------</td>
</tr>
<tr>
<td>Wrights Stain Cert.</td>
<td>68958-92-1</td>
<td>92152</td>
</tr>
<tr>
<td>Xylene Cyanol FF</td>
<td>2650-17-1</td>
<td>92496</td>
</tr>
<tr>
<td>Xylene Cyanol FF</td>
<td>4463-44-9</td>
<td>92500</td>
</tr>
<tr>
<td>Xylidine Ponceau 2R</td>
<td>3761-53-3</td>
<td>93180</td>
</tr>
</tbody>
</table>

Our Certified Stains And Dyes are Certified by the Biological Stains Commission.
<table>
<thead>
<tr>
<th>Product</th>
<th>CAS#</th>
<th>Our Code #</th>
</tr>
</thead>
<tbody>
<tr>
<td>p-Acetamidobenzaldehyde 99%</td>
<td>122-85-0</td>
<td>00104</td>
</tr>
<tr>
<td>Acriflavine HCl</td>
<td>8063-24-9</td>
<td>00965</td>
</tr>
<tr>
<td>Acriflavine Neutral</td>
<td>8048-52-0</td>
<td>00969</td>
</tr>
<tr>
<td>ADA-Acetamidoiminodiacetic</td>
<td>26239-55-4</td>
<td>01020</td>
</tr>
<tr>
<td>1-Adamantanamine 99%</td>
<td>768-94-5</td>
<td>01092</td>
</tr>
<tr>
<td>1-Adamantanamine HCl</td>
<td>665-66-7</td>
<td>01095</td>
</tr>
<tr>
<td>Adamantane 99%</td>
<td>281-23-2</td>
<td>01201</td>
</tr>
<tr>
<td>1-Adamantanecarboxylic Acid</td>
<td>828-51-3</td>
<td>01210</td>
</tr>
<tr>
<td>1-Adamantanol 99%</td>
<td>768-95-6</td>
<td>01220</td>
</tr>
<tr>
<td>2-Adamantanol</td>
<td>700-57-2</td>
<td>01226</td>
</tr>
<tr>
<td>2-Adamantanone</td>
<td>700-58-3</td>
<td>01236</td>
</tr>
<tr>
<td>9-Aminoacridine HCl</td>
<td>52417-22-8</td>
<td>03141</td>
</tr>
<tr>
<td>4-Aminoantipyrine ACS</td>
<td>83-07-8</td>
<td>03148</td>
</tr>
<tr>
<td>2-Amino-6-Fluorobenzothiazole</td>
<td>348-40-3</td>
<td>03150</td>
</tr>
<tr>
<td>1-Amino-2-Naphthol HCl</td>
<td>52417-22-8</td>
<td>03141</td>
</tr>
<tr>
<td>2-Amino-3-Chlorobenzoic Acid</td>
<td>6388-47-2</td>
<td>03171</td>
</tr>
<tr>
<td>2-Amino-5-Chlorobenzoic Acid</td>
<td>635-21-2</td>
<td>03173</td>
</tr>
<tr>
<td>2-Amino-6-Chlorobenzoic Acid</td>
<td>2148-56-3</td>
<td>03176</td>
</tr>
<tr>
<td>3-Amino-4-Chlorobenzoic Acid</td>
<td>2840-28-0</td>
<td>03178</td>
</tr>
<tr>
<td>2-(2-Aminoethyl)pyridine</td>
<td>2706-56-1</td>
<td>03182</td>
</tr>
<tr>
<td>2-Amino-5-methylbenzoic acid</td>
<td>2941-78-8</td>
<td>03183</td>
</tr>
<tr>
<td>8-Aminoquinoline</td>
<td>578-66-5</td>
<td>03186</td>
</tr>
<tr>
<td>4-Amino-3-nitrophenol 98%</td>
<td>610-81-1</td>
<td>03192</td>
</tr>
<tr>
<td>Anthracene 99%</td>
<td>120-12-7</td>
<td>03642</td>
</tr>
<tr>
<td>Benzimidazole</td>
<td>51-17-2</td>
<td>05301</td>
</tr>
<tr>
<td>Bismuth Citrate USP</td>
<td>813-93-4</td>
<td>06101</td>
</tr>
<tr>
<td>Bismuth Nitrate ACS</td>
<td>10035-06-0</td>
<td>06131</td>
</tr>
<tr>
<td>Bismuth Subcarbonate USP</td>
<td>5892-10-4</td>
<td>06200</td>
</tr>
<tr>
<td>Bismuth Subgallate USP</td>
<td>99-26-3</td>
<td>06220</td>
</tr>
<tr>
<td>Bismuth Subnitrate USP/NF</td>
<td>1304-85-4</td>
<td>06240</td>
</tr>
<tr>
<td>Bismuth SubSalicylate USP</td>
<td>14882-18-9</td>
<td>06260</td>
</tr>
<tr>
<td>Bismuth Tribromophenate</td>
<td>5175-83-7</td>
<td>06281</td>
</tr>
<tr>
<td>2-Bromoadamantane 98%</td>
<td>7314-85-4</td>
<td>08126</td>
</tr>
<tr>
<td>3-Bromobenzoic Acid</td>
<td>585-76-2</td>
<td>08128</td>
</tr>
<tr>
<td>5-Bromo-2-chlorobenzoic acid</td>
<td>21739-92-4</td>
<td>08134</td>
</tr>
<tr>
<td>5-Bromoindole 99%</td>
<td>10075-50-0</td>
<td>08158</td>
</tr>
<tr>
<td>4-Bromoisoquinoline 98%</td>
<td>1532-97-4</td>
<td>08467</td>
</tr>
<tr>
<td>6-Bromo2-Naphthol 98%</td>
<td>15231-91-1</td>
<td>08472</td>
</tr>
<tr>
<td>5-Bromovanillin</td>
<td>2973-76-4</td>
<td>08487</td>
</tr>
<tr>
<td>5-Bromo-2-nitropyridine</td>
<td>39856-50-3</td>
<td>08800</td>
</tr>
<tr>
<td>Calamine Powder USP</td>
<td>1314-13-2</td>
<td>09100</td>
</tr>
<tr>
<td>Cetyltrimethylammonium bromide</td>
<td>57-09-0</td>
<td>09550</td>
</tr>
<tr>
<td>1-Chloroadamantane 98%</td>
<td>935-56-8</td>
<td>09660</td>
</tr>
<tr>
<td>5-Chloroindole</td>
<td>17422-32-1</td>
<td>09682</td>
</tr>
<tr>
<td>2-Chloro-5-nitrobenzaldehyde</td>
<td>6361-21-3</td>
<td>09700</td>
</tr>
<tr>
<td>4-Chloro-3-nitrophenol 98%</td>
<td>610-78-6</td>
<td>09724</td>
</tr>
<tr>
<td>4-Chlorothymol</td>
<td>89-68-9</td>
<td>09890</td>
</tr>
<tr>
<td>Colloidal Silver</td>
<td>9015-51-4</td>
<td>10950</td>
</tr>
<tr>
<td>Product</td>
<td>CAS#</td>
<td>Our Code #</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>Creatinine</td>
<td>60-27-5</td>
<td>11662</td>
</tr>
<tr>
<td>4-Cyanophenylhydrazine HCl</td>
<td>2863-98-1</td>
<td>12501</td>
</tr>
<tr>
<td>2,7-Dibromofluorene</td>
<td>16433-88-8</td>
<td>13250</td>
</tr>
<tr>
<td>2,6-Dibromophenol</td>
<td>608-33-3</td>
<td>13400</td>
</tr>
<tr>
<td>2,3-Dichlorobenzoic Acid</td>
<td>50-45-3</td>
<td>14117</td>
</tr>
<tr>
<td>2,6-Dichlorobenzoic Acid</td>
<td>50-30-6</td>
<td>14120</td>
</tr>
<tr>
<td>3,5-Dichlorobenzoic Acid</td>
<td>51-36-5</td>
<td>14123</td>
</tr>
<tr>
<td>2,3-Dichloro-5,6-dicyano-1,4-benzoquinone</td>
<td>84-58-2</td>
<td>14125</td>
</tr>
<tr>
<td>3,5-Dichloro-2-Hydroxybenzenesulfonic Acid Sodium Salt</td>
<td>54970-72-8</td>
<td>14127</td>
</tr>
<tr>
<td>n,n-Diethyl-p-phenylene diamine oxalate</td>
<td>62637-92-7</td>
<td>14160</td>
</tr>
<tr>
<td>2,4-Dihydroxybenzaldehyde 99%</td>
<td>95-01-2</td>
<td>14162</td>
</tr>
<tr>
<td>3,5-Dimethoxyaniline 98%</td>
<td>10272-07-8</td>
<td>14168</td>
</tr>
<tr>
<td>2,3-Dimethoxybenzoic Acid</td>
<td>1521-38-6</td>
<td>14171</td>
</tr>
<tr>
<td>2,5-Dimethoxybenzoic Acid</td>
<td>2785-98-0</td>
<td>14175</td>
</tr>
<tr>
<td>3,4-Dimethoxybenzoic Acid</td>
<td>93-07-2</td>
<td>14178</td>
</tr>
<tr>
<td>3-(Dimethylamino)phenol 97%</td>
<td>99-07-0</td>
<td>14199</td>
</tr>
<tr>
<td>2,2-Dimethylsuccinic acid</td>
<td>597-43-3</td>
<td>14204</td>
</tr>
<tr>
<td>n,n-Dimethyl-p-phenylene diamine 1 HCl</td>
<td>2052-46-2</td>
<td>14215</td>
</tr>
<tr>
<td>n,n-Dimethyl-p-phenylene diamine Oxalate</td>
<td>62778-12-5</td>
<td>14217</td>
</tr>
<tr>
<td>2,4-Dinitrobenzaldehyde</td>
<td>528-75-6</td>
<td>14229</td>
</tr>
<tr>
<td>2,2'-Dipyridyl ACS</td>
<td>366-18-7</td>
<td>14301</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product</th>
<th>CAS#</th>
<th>Our Code #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dithiooxamide 98%</td>
<td>79-40-3</td>
<td>14527</td>
</tr>
<tr>
<td>1,4-Dithiothreitol (DTT)</td>
<td>3483-12-3</td>
<td>14551</td>
</tr>
<tr>
<td>Dodecyl Gallate</td>
<td>1166-52-5</td>
<td>18540</td>
</tr>
<tr>
<td>Ethidium Bromide</td>
<td>1239-45-8</td>
<td>20420</td>
</tr>
<tr>
<td>EDTA Dipotassium Dihydrate</td>
<td>25102-12-9</td>
<td>20439</td>
</tr>
<tr>
<td>Ferrous Sulfate 7 Hydrate</td>
<td>7782-63-0</td>
<td>22221</td>
</tr>
<tr>
<td>Fluorene 99%</td>
<td>86-73-7</td>
<td>22252</td>
</tr>
<tr>
<td>9-Fluorenone 99%</td>
<td>486-25-9</td>
<td>22272</td>
</tr>
<tr>
<td>Guanine</td>
<td>73-40-5</td>
<td>26752</td>
</tr>
<tr>
<td>Guanosine</td>
<td>118-00-3</td>
<td>26802</td>
</tr>
<tr>
<td>2-Hydrizinobenzoic Acid HCl</td>
<td>52356-01-1</td>
<td>31177</td>
</tr>
<tr>
<td>4-Hydrizinobenzoic Acid Base</td>
<td>619-67-0</td>
<td>31180</td>
</tr>
<tr>
<td>4-Hydrizinobenzoic Acid HCl</td>
<td>24589-77-3</td>
<td>31182</td>
</tr>
<tr>
<td>Hydrindantin Dihydrate</td>
<td>5950-69-6</td>
<td>31251</td>
</tr>
<tr>
<td>Hydrocinnamic Acid</td>
<td>501-52-0</td>
<td>31402</td>
</tr>
<tr>
<td>3-Hydroxybenzaldehyde 98%</td>
<td>100-83-4</td>
<td>31702</td>
</tr>
<tr>
<td>7-Hydroxycoumarin</td>
<td>93-35-6</td>
<td>31702</td>
</tr>
<tr>
<td>3-Hydroxy-4-methylbenzoic Acid</td>
<td>586-30-1</td>
<td>32050</td>
</tr>
<tr>
<td>6-Hydroxynicotinic Acid 98%</td>
<td>5006-66-6</td>
<td>31702</td>
</tr>
<tr>
<td>N-Hydroxy Phthalimide</td>
<td>524-38-9</td>
<td>32103</td>
</tr>
<tr>
<td>3-Hydroxypicolinic Acid 98%</td>
<td>874-24-8</td>
<td>32110</td>
</tr>
<tr>
<td>6-Hydroxypicolinic Acid</td>
<td>19621-92-2</td>
<td>32112</td>
</tr>
<tr>
<td>2-Hydroxyquinoline</td>
<td>59-31-4</td>
<td>32129</td>
</tr>
<tr>
<td>5-Hydroxyquinoline</td>
<td>578-67-6</td>
<td>32132</td>
</tr>
<tr>
<td>Product</td>
<td>CAS#</td>
<td>Our Code #</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>---------</td>
<td>------------</td>
</tr>
<tr>
<td>6-Hydroxyquinoline</td>
<td>580-16-5</td>
<td>32134</td>
</tr>
<tr>
<td>8-Hydroxyquinoline Sulfate</td>
<td>207386-91-2</td>
<td>32146</td>
</tr>
<tr>
<td>N-Hydroxy Succinimide</td>
<td>6066-82-6</td>
<td>32302</td>
</tr>
<tr>
<td>Indole-3-Acetic Acid</td>
<td>87-51-4</td>
<td>34027</td>
</tr>
<tr>
<td>Indole-3-Butyric Acid</td>
<td>133-32-4</td>
<td>34031</td>
</tr>
<tr>
<td>Indole-3-Carboxaldehyde</td>
<td>487-89-8</td>
<td>34034</td>
</tr>
<tr>
<td>Iodoform USP/BP/DAB</td>
<td>75-47-8</td>
<td>35160</td>
</tr>
<tr>
<td>Kojic Acid 99%</td>
<td>501-30-4</td>
<td>4023</td>
</tr>
<tr>
<td>Lithium Dodecyl Sulfate</td>
<td>2044-56-6</td>
<td>46220</td>
</tr>
<tr>
<td>Luminol</td>
<td>521-31-3</td>
<td>46311</td>
</tr>
<tr>
<td>Magnesium Dodecyl Sulfate 1HY</td>
<td>3097-08-3</td>
<td>49111</td>
</tr>
<tr>
<td>3-Methoxy-4-methylbenzoic Acid</td>
<td>7151-68-0</td>
<td>50208</td>
</tr>
<tr>
<td>5-Methoxyindole 99%</td>
<td>1006-94-6</td>
<td>50212</td>
</tr>
<tr>
<td>3-Methoxysalicylic Acid</td>
<td>877-22-5</td>
<td>50215</td>
</tr>
<tr>
<td>4-Methoxysalicylic Acid</td>
<td>2237-36-7</td>
<td>50217</td>
</tr>
<tr>
<td>2-Methyl-2-adamantanol</td>
<td>702-98-7</td>
<td>50230</td>
</tr>
<tr>
<td>Methylene Blue USP</td>
<td>7220-79-3</td>
<td>50261</td>
</tr>
<tr>
<td>Methyl Gallate 99%</td>
<td>99-24-1</td>
<td>50304</td>
</tr>
<tr>
<td>Methyl-3-Hydroxybenzoate</td>
<td>19438-10-9</td>
<td>50327</td>
</tr>
<tr>
<td>Methyl-4-hydroxyphenyl Acetate 99%</td>
<td>14199-15-6</td>
<td>50329</td>
</tr>
<tr>
<td>4-Methylsalicylic Acid 99%</td>
<td>50-85-1</td>
<td>50372</td>
</tr>
<tr>
<td>5-Methylsalicylic Acid 99%</td>
<td>89-56-5</td>
<td>50375</td>
</tr>
<tr>
<td>4-Methyl-5-Thiazolecarboxylic Acid 97%</td>
<td>20485-41-0</td>
<td>50379</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product</th>
<th>CAS#</th>
<th>Our Code #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mucic Acid</td>
<td>526-99-8</td>
<td>52002</td>
</tr>
<tr>
<td>2-Naphthaldehyde 98%</td>
<td>66-99-9</td>
<td>53251</td>
</tr>
<tr>
<td>1-Naphthaleneacetic Acid</td>
<td>86-87-3</td>
<td>53340</td>
</tr>
<tr>
<td>2-Naphthoic Acid 99%</td>
<td>93-09-4</td>
<td>53356</td>
</tr>
<tr>
<td>Naphthoresorcinol</td>
<td>132-86-5</td>
<td>53370</td>
</tr>
<tr>
<td>Nickel II Bromide Anhydrous</td>
<td>13462-88-9</td>
<td>54170</td>
</tr>
<tr>
<td>4-Nitroanthranilic Acid</td>
<td>619-17-0</td>
<td>54331</td>
</tr>
<tr>
<td>2-Nitrobenzaldehyde</td>
<td>552-89-6</td>
<td>54352</td>
</tr>
<tr>
<td>4-Nitrobenzaldehyde</td>
<td>555-16-8</td>
<td>54358</td>
</tr>
<tr>
<td>3-Nitrobenzonitrile 99%</td>
<td>619-24-9</td>
<td>54370</td>
</tr>
<tr>
<td>2-Nitrobenzylalcohol 99%</td>
<td>612-25-9</td>
<td>54382</td>
</tr>
<tr>
<td>4-Nitrobenzylalcohol 99%</td>
<td>619-73-8</td>
<td>54388</td>
</tr>
<tr>
<td>p-Nitrobenzyl Bromide</td>
<td>100-11-8</td>
<td>54396</td>
</tr>
<tr>
<td>4-Nitrobenzyl Chloride</td>
<td>100-14-1</td>
<td>54399</td>
</tr>
<tr>
<td>1-Nitroso-R-Salt</td>
<td>525-05-3</td>
<td>55221</td>
</tr>
<tr>
<td>3-Noradamanatanecarboxylic Acid</td>
<td>16200-53-6</td>
<td>55301</td>
</tr>
<tr>
<td>Octyl Gallate</td>
<td>1034-01-1</td>
<td>57240</td>
</tr>
<tr>
<td>Orcinol Monohydrate</td>
<td>6153-39-5</td>
<td>58201</td>
</tr>
<tr>
<td>Oxonic Acid Potassium Salt</td>
<td>2207-75-2</td>
<td>58902</td>
</tr>
<tr>
<td>Phenanthrenequinone</td>
<td>84-11-7</td>
<td>62202</td>
</tr>
<tr>
<td>Phenylmercuric Acetate NF</td>
<td>62-38-4</td>
<td>62340</td>
</tr>
<tr>
<td>Phenylmercuric Nitrate NF</td>
<td>55-68-5</td>
<td>62370</td>
</tr>
<tr>
<td>Phloroglucinol 2 Hydrate</td>
<td>6099-90-7</td>
<td>62382</td>
</tr>
<tr>
<td>Phosphotungstic Acid Hydrate</td>
<td>12501-23-4</td>
<td>62420</td>
</tr>
<tr>
<td>Product</td>
<td>CAS#</td>
<td>Our Code #</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------</td>
<td>------------</td>
</tr>
<tr>
<td>o-Phthalaldehyde</td>
<td>643-79-8</td>
<td>62431</td>
</tr>
<tr>
<td>Praziquantel USP</td>
<td>55268-74-1</td>
<td>63825</td>
</tr>
<tr>
<td>Proflavine HCl</td>
<td>952-23-8</td>
<td>63879</td>
</tr>
<tr>
<td>Quinhydrone 98%</td>
<td>106-34-3</td>
<td>68182</td>
</tr>
<tr>
<td>Quinidine Sulfate 2 HY USP</td>
<td>6591-63-5</td>
<td>68192</td>
</tr>
<tr>
<td>Quinine HCl 2HY</td>
<td>6119-47-7</td>
<td>68222</td>
</tr>
<tr>
<td>Quinine Sulfate Dihydrate USP</td>
<td>6119-70-6</td>
<td>68234</td>
</tr>
<tr>
<td>Rhodizonic Acid Disodium Salt</td>
<td>523-21-7</td>
<td>71102</td>
</tr>
<tr>
<td>Silver Iodide Purified</td>
<td>7783-96-2</td>
<td>74130</td>
</tr>
<tr>
<td>Silver Protein Mild</td>
<td>9015-51-4</td>
<td>74151</td>
</tr>
<tr>
<td>Silver Protein Strong</td>
<td>9008-42-8</td>
<td>74160</td>
</tr>
<tr>
<td>Sodium Pyruvate</td>
<td>113-24-6</td>
<td>74682</td>
</tr>
<tr>
<td>Sodium Salicylate 99%</td>
<td>54-21-7</td>
<td>74820</td>
</tr>
<tr>
<td>Succinic Acid ACS</td>
<td>110-15-6</td>
<td>76300</td>
</tr>
<tr>
<td>Succinic Acid Disodium Salt 6HY</td>
<td>6106-21-4</td>
<td>76303</td>
</tr>
<tr>
<td>Succinic Acid Disodium Salt Anhydrous</td>
<td>150-90-3</td>
<td>76305</td>
</tr>
<tr>
<td>Succinic Anhydride</td>
<td>108-30-5</td>
<td>76308</td>
</tr>
<tr>
<td>Sulfobromophthalein Sodium</td>
<td>123359-42-2</td>
<td>76473</td>
</tr>
<tr>
<td>Tannic Acid ACS</td>
<td>1401-55-4</td>
<td>77900</td>
</tr>
<tr>
<td>Thiosemicarbazide 99%</td>
<td>79-19-6</td>
<td>78170</td>
</tr>
<tr>
<td>Thymine 99%</td>
<td>65-71-4</td>
<td>78176</td>
</tr>
<tr>
<td>Thymol NF</td>
<td>89-83-8</td>
<td>78178</td>
</tr>
<tr>
<td>Thymol Iodide</td>
<td>552-22-7</td>
<td>78200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product</th>
<th>CAS#</th>
<th>Our Code #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiron</td>
<td>149-45-1</td>
<td>78401</td>
</tr>
<tr>
<td>1,2,4-Triazole 99%</td>
<td>288-88-0</td>
<td>79251</td>
</tr>
<tr>
<td>3,4,5-Trimethoxyaniline 98%</td>
<td>24313-88-0</td>
<td>80165</td>
</tr>
<tr>
<td>Tiron</td>
<td>149-45-1</td>
<td>78401</td>
</tr>
<tr>
<td>1,2,4-Triazole 99%</td>
<td>288-88-0</td>
<td>79251</td>
</tr>
<tr>
<td>3,4,5-Trimethoxyaniline 98%</td>
<td>24313-88-0</td>
<td>80165</td>
</tr>
</tbody>
</table>
Dudley Chemical has invested many hours of time & effort to making customer satisfaction with our products, their top priority.

We are always adding New Products. Don’t be hesitant to call us if a custom project / product is what you are looking for.
<table>
<thead>
<tr>
<th>Product</th>
<th>CAS#</th>
<th>Our Code #</th>
<th>pH Range &amp; Color Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alizarin Complexone 2HY</td>
<td>3952-78-1</td>
<td>02793</td>
<td></td>
</tr>
<tr>
<td>Alizarin Red S</td>
<td>130-22-3</td>
<td>02851</td>
<td>Y 4.6-6.0 R</td>
</tr>
<tr>
<td>Alizarin Yellow GG</td>
<td>584-42-9</td>
<td>02861</td>
<td>C 10.0-12.0 Y</td>
</tr>
<tr>
<td>Alizarin Yellow R</td>
<td>1718-34-9</td>
<td>02872</td>
<td>Y 10.0-12.0 R</td>
</tr>
<tr>
<td>Benzopurpurin 4B</td>
<td>992-59-6</td>
<td>05401</td>
<td>V 1.2-4.0 R</td>
</tr>
<tr>
<td>Brilliant Green</td>
<td>633-03-4</td>
<td>08121</td>
<td>Y 0.0-2.6 G</td>
</tr>
<tr>
<td>Brilliant Yellow</td>
<td>3051-11-4</td>
<td>08118</td>
<td>Y 6.4-8.0 O</td>
</tr>
<tr>
<td>Bromochlorophenol Blue SS</td>
<td>102185-52-4</td>
<td>08138</td>
<td>Y 3.0-4.6 B</td>
</tr>
<tr>
<td>Bromocresol Green F. A. ACS</td>
<td>76-60-8</td>
<td>08142</td>
<td>Y 3.8-5.4 B</td>
</tr>
<tr>
<td>Bromocresol Green S.S. ACS</td>
<td>62625-32-5</td>
<td>08146</td>
<td>Y 3.8-5.4 B</td>
</tr>
<tr>
<td>Bromocresol Purple F.A. ACS</td>
<td>115-40-2</td>
<td>08152</td>
<td>Y 5.2-6.8 P</td>
</tr>
<tr>
<td>Bromocresol Purple S.S. ACS</td>
<td>62625-30-3</td>
<td>08156</td>
<td>Y 5.2-6.8 P</td>
</tr>
<tr>
<td>Bromophenol Blue F.A. ACS</td>
<td>115-39-9</td>
<td>08162</td>
<td>Y 3.0-4.6 B</td>
</tr>
<tr>
<td>Bromophenol Blue S.S. ACS</td>
<td>34722-90-2</td>
<td>08176</td>
<td>Y 3.0-4.6 B</td>
</tr>
<tr>
<td>Bromophenol Red F.A. ACS</td>
<td>2800-80-8</td>
<td>08440</td>
<td>O 5.2-6.8 P</td>
</tr>
<tr>
<td>Bromophenol Red S.S. ACS</td>
<td>102185-50-2</td>
<td>08443</td>
<td>O 5.2-6.8 P</td>
</tr>
<tr>
<td>Bromothymol Blue F.A. ACS</td>
<td>76-59-5</td>
<td>08172</td>
<td>Y 6.0-7.6 B</td>
</tr>
<tr>
<td>Bromothymol Blue S.S. ACS</td>
<td>40070-59-5</td>
<td>08490</td>
<td>Y 6.0-7.6 B</td>
</tr>
<tr>
<td>Bromoxylenol Blue</td>
<td>40070-59-5</td>
<td>08490</td>
<td>O 5.7-7.5 B</td>
</tr>
<tr>
<td>Calconcarboxylic Acid</td>
<td>3737-95-9</td>
<td>09268</td>
<td>O 5.7-7.5 B</td>
</tr>
<tr>
<td>Carminic Acid</td>
<td>1260-17-9</td>
<td>09464</td>
<td>Y 4.8-6.2 P</td>
</tr>
<tr>
<td>Chlorophenol Red</td>
<td>4430-20-0</td>
<td>09801</td>
<td>Y 5.0-6.6 R</td>
</tr>
<tr>
<td>Congo Red</td>
<td>573-58-0</td>
<td>11100</td>
<td>B 3.0-5.0 R</td>
</tr>
<tr>
<td>o-Cresolphthalein</td>
<td>596-27-0</td>
<td>12100</td>
<td>C 8.2-9.8 R</td>
</tr>
<tr>
<td>Product</td>
<td>CAS#</td>
<td>Our Code #</td>
<td>pH Range &amp; Color Change</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------</td>
<td>------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>o-Cresolphthalein</td>
<td>2411-89-4</td>
<td>12102</td>
<td>C 8.2-9.8 R</td>
</tr>
<tr>
<td>Complexone ACS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o-Cresolphthalein</td>
<td>94442-10-1</td>
<td>12103</td>
<td>C 8.2-9.8 R</td>
</tr>
<tr>
<td>Complexone Sodium Salt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meta-Cresol Purple</td>
<td>2303-01-7</td>
<td>12130</td>
<td>R 1.0-2.8 Y</td>
</tr>
<tr>
<td>Meta-Cresol Purple W/S</td>
<td>66265-31-4</td>
<td>12135</td>
<td>Y 7.4-9.0 P</td>
</tr>
<tr>
<td>Cresol Red</td>
<td>1733-12-6</td>
<td>12152</td>
<td>Y 7.0-8.8 R</td>
</tr>
<tr>
<td>Cresol Red</td>
<td>66265-29-0</td>
<td>12157</td>
<td>R 1.0-2.0 Y</td>
</tr>
<tr>
<td>Crystal Violet</td>
<td>548-62-9</td>
<td>12186</td>
<td>Y 0.0-1.8 B</td>
</tr>
<tr>
<td>Curcumin</td>
<td>458-37-7</td>
<td>12350</td>
<td>Y 7.4-8.6 R</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>R 10.2-11.8 O</td>
</tr>
<tr>
<td>Eriochrome Blue Black R</td>
<td>2538-85-4</td>
<td>20320</td>
<td></td>
</tr>
<tr>
<td>Erythrosin B</td>
<td>16423-68-0</td>
<td>20354</td>
<td>O 2.2-3.6 R</td>
</tr>
<tr>
<td>Ethyl Orange Sodium Salt</td>
<td>66275-12-7</td>
<td>20507</td>
<td>R 3.2-4.8 Y</td>
</tr>
<tr>
<td>Ethyl Red Indicator</td>
<td>76058-33-8</td>
<td>20582</td>
<td>R 4.5-6.5 Y</td>
</tr>
<tr>
<td>Ethyl Violet</td>
<td>2390-59-2</td>
<td>20602</td>
<td>Y 0.0-1.8 B</td>
</tr>
<tr>
<td>Fast Garnet GBC Base</td>
<td>97-56-3</td>
<td>21020</td>
<td>O 1.4-2.8 Y</td>
</tr>
<tr>
<td>Fast Sulphon Black F</td>
<td>3682-47-1</td>
<td>21140</td>
<td></td>
</tr>
<tr>
<td>Fluorexon / Calcein</td>
<td>1461-15-0</td>
<td>23701</td>
<td>Lt G 6.0-7.2 DG</td>
</tr>
<tr>
<td>Fuchsin Acid</td>
<td>3244-88-0</td>
<td>24498</td>
<td>R 12.0-14.0 C</td>
</tr>
<tr>
<td>Fuchsin Basic</td>
<td>632-99-5</td>
<td>24524</td>
<td>P 1.2-3.0 R</td>
</tr>
<tr>
<td>Hematoxylin</td>
<td>517-28-2</td>
<td>30118</td>
<td>Y 5.0-6.0 V/B</td>
</tr>
<tr>
<td>Indigo Carmine</td>
<td>860-22-0</td>
<td>34001</td>
<td>B 11.4-13.0 Y</td>
</tr>
<tr>
<td>Iodine Indicator</td>
<td>9005-84-9</td>
<td>34024</td>
<td></td>
</tr>
<tr>
<td>Product</td>
<td>CAS#</td>
<td>Our Code #</td>
<td>pH Range &amp; Color Change</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------</td>
<td>------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>p-Iodonitrotetrazolium Violet</td>
<td>146-68-9</td>
<td>35198</td>
<td></td>
</tr>
<tr>
<td>Lacmoid</td>
<td>42249-61-6</td>
<td>44100</td>
<td>R 4.2-6.4 B</td>
</tr>
<tr>
<td>Litmus</td>
<td>1393-92-6</td>
<td>46252</td>
<td>R 4.5-8.3 B</td>
</tr>
<tr>
<td>Malachite Green Oxalate</td>
<td>2437-29-8</td>
<td>49161</td>
<td>Y 0.2-1.8 B</td>
</tr>
<tr>
<td>Metalphthalein ACS</td>
<td>2411-89-4</td>
<td>50202</td>
<td>C 8.2-9.8 R</td>
</tr>
<tr>
<td>Metanil Yellow</td>
<td>587-98-4</td>
<td>50206</td>
<td>R 1.2-3.0 Y</td>
</tr>
<tr>
<td>Methyl Green</td>
<td>7114-03-6</td>
<td>50321</td>
<td>Y 0.2-1.8 B</td>
</tr>
<tr>
<td>Methyl Orange ACS</td>
<td>547-58-0</td>
<td>50341</td>
<td>R 3.2-4.4 Y</td>
</tr>
<tr>
<td>Methyl Red Free Acid ACS</td>
<td>493-52-7</td>
<td>50362</td>
<td>R 4.4-6.2 Y</td>
</tr>
<tr>
<td>Methyl Red HCL ACS</td>
<td>63451-28-5</td>
<td>50364</td>
<td>R 4.4-6.2 Y</td>
</tr>
<tr>
<td>Methyl Red Sodium Salt ACS</td>
<td>845-10-3</td>
<td>50368</td>
<td>R 4.4-6.2 Y</td>
</tr>
<tr>
<td>Methylthymol Blue Sodium Salt ACS</td>
<td>1945-77-3</td>
<td>50390</td>
<td>Y 6.5-8.5 B</td>
</tr>
<tr>
<td>Methyl Violet 2B</td>
<td>8004-87-3</td>
<td>50422</td>
<td>Y 0.0-2.0 B</td>
</tr>
<tr>
<td>Morin Hydrate</td>
<td>480-16-0</td>
<td>51601</td>
<td></td>
</tr>
<tr>
<td>Murexide ACS</td>
<td>3051-09-0</td>
<td>52151</td>
<td>4.0-7.3</td>
</tr>
<tr>
<td>Naphtholbenzein</td>
<td>145-50-6</td>
<td>53359</td>
<td>C 8.2-10.0 B</td>
</tr>
<tr>
<td>Naphthol Green B ACS</td>
<td>19381-50-1</td>
<td>53361</td>
<td></td>
</tr>
<tr>
<td>a-Naphtholphthalein</td>
<td>596-01-0</td>
<td>53365</td>
<td>Br 7.1-8.3 B</td>
</tr>
<tr>
<td>1-Naphthol Red HCl</td>
<td>83833-14-1</td>
<td>53400</td>
<td>R/Y 3.7-5.0 O</td>
</tr>
<tr>
<td>Neutral Red</td>
<td>553-24-2</td>
<td>54150</td>
<td>R 6.8-8.0 A</td>
</tr>
<tr>
<td>Nile Blue A</td>
<td>3625-57-8</td>
<td>54221</td>
<td>B 10.0-11.0 P/R</td>
</tr>
<tr>
<td>3-Nitrophenol 99% (m-Nitrophenol)</td>
<td>554-84-7</td>
<td>54802</td>
<td>C 6.8-8.6 Y</td>
</tr>
<tr>
<td>Product</td>
<td>CAS#</td>
<td>Our Code #</td>
<td>pH Range &amp; Color Change</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>----------</td>
<td>------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>4-Nitrophenol (p-Nitrophenol)</td>
<td>100-02-7</td>
<td>54805</td>
<td>C  5.4-7.6   Y</td>
</tr>
<tr>
<td>Orange IV</td>
<td>554-73-4</td>
<td>57620</td>
<td>R  1.4-2.8   Y</td>
</tr>
<tr>
<td>1-(2-Pyridylazo)-2-Naphthol</td>
<td>85-85-8</td>
<td>61151</td>
<td></td>
</tr>
<tr>
<td>P.A.R. Free Acid ACS</td>
<td>1141-59-9</td>
<td>61179</td>
<td></td>
</tr>
<tr>
<td>P.A.R. Monosodium ACS</td>
<td>16593-81-0</td>
<td>61182</td>
<td></td>
</tr>
<tr>
<td>Patent Blue VF</td>
<td>129-17-9</td>
<td>61210</td>
<td>Y  0.8-3.0   B</td>
</tr>
<tr>
<td>Phenol Red Free Acid ACS</td>
<td>143-74-8</td>
<td>62272</td>
<td>Y  6.8-8.4   R</td>
</tr>
<tr>
<td>Phenol Red Sodium Salt ACS</td>
<td>34487-61-1</td>
<td>62277</td>
<td>Y  6.8-8.4   R</td>
</tr>
<tr>
<td>Phenolphthalein White ACS/USP</td>
<td>77-09-8</td>
<td>62300</td>
<td>C  8.0-10.0  R</td>
</tr>
<tr>
<td>4-(Phenylazo) diphenylamine</td>
<td>101-75-7</td>
<td>62334</td>
<td>R  1.2-2.5   Y</td>
</tr>
<tr>
<td>Propyl Red</td>
<td>2641-01-2</td>
<td>64200</td>
<td>R  4.6-6.6   Y</td>
</tr>
<tr>
<td>Pyrocatechol Violet</td>
<td>115-41-3</td>
<td>64825</td>
<td>Y-B-G</td>
</tr>
<tr>
<td>Pyrogallol ACS</td>
<td>87-66-1</td>
<td>64847</td>
<td>Y  3.8-6.6  R Pink 10.6-13.0 P</td>
</tr>
<tr>
<td>Quinaldine Red</td>
<td>117-92-0</td>
<td>68150</td>
<td>C  1.0-2.2   R</td>
</tr>
<tr>
<td>Resazurin</td>
<td>62758-13-8</td>
<td>69101</td>
<td>O  3.8-6.5   Y</td>
</tr>
<tr>
<td>SPADS ACS</td>
<td>23647-14-5</td>
<td>75900</td>
<td></td>
</tr>
<tr>
<td>Stains-All</td>
<td>7423-31-6</td>
<td>76021</td>
<td>C  2.4-3.4   P</td>
</tr>
<tr>
<td>Thiazolyl Blue (MTT)</td>
<td>298-93-1</td>
<td>78096</td>
<td></td>
</tr>
<tr>
<td>Thorin I</td>
<td>3688-92-4</td>
<td>78174</td>
<td></td>
</tr>
<tr>
<td>Product</td>
<td>CAS#</td>
<td>Our Code #</td>
<td>pH Range &amp; Color Change</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------</td>
<td>------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Thymol Blue Free Acid ACS</td>
<td>76-61-9</td>
<td>78182</td>
<td>R 1.2-2.8 Y Y 8.0-9.2 B</td>
</tr>
<tr>
<td>Thymol Blue Sodium Salt ACS</td>
<td>62625-21-2</td>
<td>78186</td>
<td>R 1.2-2.8 Y Y 8.0-9.2 B</td>
</tr>
<tr>
<td>Thymolphthalein ACS</td>
<td>125-20-2</td>
<td>78222</td>
<td>C 8.8-10.5 B</td>
</tr>
<tr>
<td>Thymolphthalein Complexone</td>
<td>1913-93-5</td>
<td>78225</td>
<td>Y 9.3-10.5 R</td>
</tr>
<tr>
<td>Tropaeolin O</td>
<td>547-57-9</td>
<td>80027</td>
<td>Y/R 1.1-12.7 O</td>
</tr>
<tr>
<td>Xylenol Blue</td>
<td>125-31-5</td>
<td>93050</td>
<td>Y 8.0-9.6 B</td>
</tr>
<tr>
<td>Xylenol Orange Tetra-Sodium Salt ACS</td>
<td>3618-43-7</td>
<td>93150</td>
<td>Y 6.4-10.4 R</td>
</tr>
<tr>
<td>pH Range Order</td>
<td>pH Range &amp; Color Change</td>
<td>CAS#</td>
<td>Our Code #</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------------</td>
<td>-----------</td>
<td>------------</td>
</tr>
<tr>
<td>Y</td>
<td>0.0-2.0</td>
<td>8004-87-3</td>
<td>50422</td>
</tr>
<tr>
<td>Y</td>
<td>0.0-1.8</td>
<td>548-62-9</td>
<td>12186</td>
</tr>
<tr>
<td>Y</td>
<td>0.0-1.8</td>
<td>2390-59-2</td>
<td>20602</td>
</tr>
<tr>
<td>Y</td>
<td>0.0-2.6</td>
<td>633-03-4</td>
<td>08121</td>
</tr>
<tr>
<td>Y</td>
<td>0.2-1.8</td>
<td>2437-29-8</td>
<td>49161</td>
</tr>
<tr>
<td>Y</td>
<td>0.2-1.8</td>
<td>7114-03-6</td>
<td>50321</td>
</tr>
<tr>
<td>Y</td>
<td>0.8-3.0</td>
<td>129-17-9</td>
<td>61210</td>
</tr>
<tr>
<td>R</td>
<td>1.0-2.0</td>
<td>62625-29-0</td>
<td>12157</td>
</tr>
<tr>
<td>C</td>
<td>1.0-2.2</td>
<td>117-92-0</td>
<td>68150</td>
</tr>
<tr>
<td>R</td>
<td>1.2-3.0</td>
<td>587-98-4</td>
<td>50206</td>
</tr>
<tr>
<td>R</td>
<td>1.2-2.5</td>
<td>101-75-7</td>
<td>62334</td>
</tr>
<tr>
<td>R</td>
<td>1.0-2.8</td>
<td>2303-01-7</td>
<td>12130</td>
</tr>
<tr>
<td>Y/R</td>
<td>1.1-12.7</td>
<td>547-57-9</td>
<td>80027</td>
</tr>
<tr>
<td>R</td>
<td>1.2-2.8</td>
<td>76-61-9</td>
<td>78182</td>
</tr>
<tr>
<td>P</td>
<td>1.2-3.0</td>
<td>632-99-5</td>
<td>24524</td>
</tr>
<tr>
<td>R</td>
<td>1.4-2.8</td>
<td>554-73-4</td>
<td>57620</td>
</tr>
<tr>
<td>O</td>
<td>1.4-2.8</td>
<td>97-56-3</td>
<td>21020</td>
</tr>
<tr>
<td>C</td>
<td>1.4-3.2</td>
<td>117-92-0</td>
<td>68150</td>
</tr>
<tr>
<td>V</td>
<td>1.2-4.0</td>
<td>992-59-6</td>
<td>05401</td>
</tr>
<tr>
<td>O</td>
<td>2.2-3.6</td>
<td>16423-68-0</td>
<td>20354</td>
</tr>
<tr>
<td>C</td>
<td>2.4-3.4</td>
<td>7423-31-6</td>
<td>76021</td>
</tr>
<tr>
<td>Y</td>
<td>3.0-4.6</td>
<td>34722-90-2</td>
<td>08176</td>
</tr>
<tr>
<td>Y</td>
<td>3.0-4.6</td>
<td>102185-52-4</td>
<td>08138</td>
</tr>
<tr>
<td>B</td>
<td>3.0-5.0</td>
<td>573-58-0</td>
<td>11100</td>
</tr>
<tr>
<td>pH Range &amp; Color Change</td>
<td>CAS#</td>
<td>Our Code #</td>
<td>Product</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------</td>
<td>------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>R 3.2-4.4 Y</td>
<td>547-58-0</td>
<td>50341</td>
<td>Methyl Orange ACS</td>
</tr>
<tr>
<td>R 3.2-4.8 Y</td>
<td>62758-12-7</td>
<td>20507</td>
<td>Ethyl Orange Sodium Salt</td>
</tr>
<tr>
<td>R/Y 3.7-5.0 O</td>
<td>83833-14-1</td>
<td>53400</td>
<td>1-Naphthol Red HCl</td>
</tr>
<tr>
<td>Y 3.8-5.4 B</td>
<td>62625-32-5</td>
<td>08146</td>
<td>Bromocresol Green</td>
</tr>
<tr>
<td>O 3.8-6.5 Y</td>
<td>62758-13-8</td>
<td>69101</td>
<td>Resazurin</td>
</tr>
<tr>
<td>Y 3.8-6.6 R</td>
<td>87-66-1</td>
<td>64847</td>
<td>Pyrogallol ACS</td>
</tr>
<tr>
<td>K 4.2-6.2 Y</td>
<td>63451-28-5</td>
<td>50364</td>
<td>Methyl Red ACS</td>
</tr>
<tr>
<td>R 4.2-6.4 B</td>
<td>42249-61-6</td>
<td>44100</td>
<td>Lacmoid</td>
</tr>
<tr>
<td>R 4.5-6.5 Y</td>
<td>76058-33-8</td>
<td>20582</td>
<td>Ethyl Red</td>
</tr>
<tr>
<td>R 4.5-8.3 B</td>
<td>1393-92-6</td>
<td>46252</td>
<td>Litmus</td>
</tr>
<tr>
<td>Y 4.6-6.0 R</td>
<td>130-22-3</td>
<td>02851</td>
<td>Alizarin Red S</td>
</tr>
<tr>
<td>R 4.6-6.6 Y</td>
<td>2641-01-2</td>
<td>64200</td>
<td>Propyl Red</td>
</tr>
<tr>
<td>Y 4.8-6.2 P</td>
<td>1260-17-9</td>
<td>09464</td>
<td>Carminic Acid</td>
</tr>
<tr>
<td>Y 5.0-6.0 V/B</td>
<td>517-28-2</td>
<td>30118</td>
<td>Hematoxylin</td>
</tr>
<tr>
<td>Y 5.0-6.6 R</td>
<td>4430-20-0</td>
<td>09801</td>
<td>Chlorophenol Red</td>
</tr>
<tr>
<td>Y 5.2-6.8 P</td>
<td>62625-30-3</td>
<td>08156</td>
<td>Bromocresol Purple</td>
</tr>
<tr>
<td>O 5.2-6.8 P</td>
<td>2800-80-8</td>
<td>08440</td>
<td>Bromophenol Red</td>
</tr>
<tr>
<td>C 5.4-7.6 Y</td>
<td>100-02-7</td>
<td>54805</td>
<td>4-Nitrophenol (p-Nitrophenol)</td>
</tr>
<tr>
<td>O 5.7-7.5 B</td>
<td>40070-59-5</td>
<td>08490</td>
<td>Bromoxylenol Blue</td>
</tr>
<tr>
<td>O 5.7-7.5 B</td>
<td>3737-95-9</td>
<td>09268</td>
<td>Calconcarboxylic Acid</td>
</tr>
<tr>
<td>Lt G 6.0-7.2 DG</td>
<td>1461-15-0</td>
<td>23701</td>
<td>Fluorexon / Calcein</td>
</tr>
<tr>
<td>Y 6.0-7.6 B</td>
<td>76-59-5</td>
<td>08172</td>
<td>Bromothymol Blue F.A. ACS</td>
</tr>
<tr>
<td>Y 6.4-8.0 O</td>
<td>3051-11-4</td>
<td>08118</td>
<td>Brilliant Yellow</td>
</tr>
<tr>
<td>pH Range Order</td>
<td>pH Range &amp; Color Change</td>
<td>CAS#</td>
<td>Our Code #</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------</td>
<td>-----------</td>
<td>------------</td>
</tr>
<tr>
<td>Y</td>
<td>6.4-10.4 R</td>
<td>3618-43-7</td>
<td>93150</td>
</tr>
<tr>
<td>Y</td>
<td>6.5-8.5 B</td>
<td>1945-77-3</td>
<td>50390</td>
</tr>
<tr>
<td>Y</td>
<td>6.8-8.4 R</td>
<td>143-74-8</td>
<td>62272</td>
</tr>
<tr>
<td>R</td>
<td>6.8-8.0 A</td>
<td>553-24-2</td>
<td>54150</td>
</tr>
<tr>
<td>C</td>
<td>6.8-8.6 Y</td>
<td>554-84-7</td>
<td>54802</td>
</tr>
<tr>
<td>Y</td>
<td>7.0-8.8 R</td>
<td>1733-12-6</td>
<td>12152</td>
</tr>
<tr>
<td>Br</td>
<td>7.1-8.3 B</td>
<td>596-01-0</td>
<td>53365</td>
</tr>
<tr>
<td>Y</td>
<td>7.4-8.6 R</td>
<td>458-37-7</td>
<td>12350</td>
</tr>
<tr>
<td>Y</td>
<td>7.4-9.0 P</td>
<td>62625-31-4</td>
<td>12135</td>
</tr>
<tr>
<td>Y</td>
<td>8.0-9.2 B</td>
<td>62625-21-2</td>
<td>78186</td>
</tr>
<tr>
<td>Y</td>
<td>8.0-9.6 B</td>
<td>125-31-5</td>
<td>93050</td>
</tr>
<tr>
<td>C</td>
<td>8.0-10.0 R</td>
<td>77-09-8</td>
<td>62300</td>
</tr>
<tr>
<td>C</td>
<td>8.2-9.8 R</td>
<td>596-27-0</td>
<td>12100</td>
</tr>
<tr>
<td>C</td>
<td>8.2-9.8 R</td>
<td>2411-89-4</td>
<td>50202</td>
</tr>
<tr>
<td>C</td>
<td>8.2-10.0 B</td>
<td>145-50-6</td>
<td>53359</td>
</tr>
<tr>
<td>C</td>
<td>8.8-10.5 B</td>
<td>125-20-2</td>
<td>78222</td>
</tr>
<tr>
<td>B</td>
<td>10.0-11.0 P/R</td>
<td>3625-57-8</td>
<td>54221</td>
</tr>
<tr>
<td>Y</td>
<td>10.0-12.0 R</td>
<td>1718-34-9</td>
<td>02872</td>
</tr>
<tr>
<td>C</td>
<td>10.0-12.0 Y</td>
<td>584-42-9</td>
<td>02861</td>
</tr>
<tr>
<td>R</td>
<td>10.2-11.8 O</td>
<td>458-37-7</td>
<td>12350</td>
</tr>
<tr>
<td>Pink</td>
<td>10.6-13.0 P</td>
<td>87-66-1</td>
<td>64847</td>
</tr>
<tr>
<td>B</td>
<td>11.4-13.0 Y</td>
<td>860-22-0</td>
<td>34001</td>
</tr>
<tr>
<td>R</td>
<td>12.0-14.0 C</td>
<td>3244-88-0</td>
<td>24498</td>
</tr>
</tbody>
</table>
Packaging from 50 grams to 50 kilo net drums.
### A TABLE OF CONVERSION FACTORS

<table>
<thead>
<tr>
<th>To Convert From</th>
<th>To</th>
<th>Multiply by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angstrom units</td>
<td>centimeters</td>
<td>$1 \times 10^{-8}$</td>
</tr>
<tr>
<td>Angstrom units</td>
<td>inches</td>
<td>$3.937 \times 10^{-9}$</td>
</tr>
<tr>
<td>Angstrom units</td>
<td>microns</td>
<td>0.0001</td>
</tr>
<tr>
<td>Atmospheres</td>
<td>dynes/sq. cm</td>
<td>$1.0133 \times 10^6$</td>
</tr>
<tr>
<td>Atmospheres</td>
<td>mm of mercury</td>
<td>760</td>
</tr>
<tr>
<td>Btu (mean)</td>
<td>calories</td>
<td>251.98</td>
</tr>
<tr>
<td>Btu (mean)</td>
<td>Foot-pounds</td>
<td>778.7</td>
</tr>
<tr>
<td>Btu (mean)</td>
<td>jouies (abs)</td>
<td>$1055.8$</td>
</tr>
<tr>
<td>Candle power (spherical)</td>
<td>lumens</td>
<td>12.566</td>
</tr>
<tr>
<td>Centimeters</td>
<td>angstrom units</td>
<td>$1 \times 10^8$</td>
</tr>
<tr>
<td>Centimeters</td>
<td>feet (U.S.)</td>
<td>0.0328</td>
</tr>
<tr>
<td>Centimeters</td>
<td>inches (U.S.)</td>
<td>0.3937</td>
</tr>
<tr>
<td>Centimeters</td>
<td>miles (U.S., statute)</td>
<td>$6.2137 \times 10^{-6}$</td>
</tr>
<tr>
<td>Cm of mercury at 0˚C</td>
<td>atmospheres</td>
<td>0.0132</td>
</tr>
<tr>
<td>Centimeters/second</td>
<td>feet/minute</td>
<td>1.9685</td>
</tr>
<tr>
<td>Centimeters/second</td>
<td>miles/hour</td>
<td>0.0224</td>
</tr>
<tr>
<td>Coulombs</td>
<td>Ab coulombs</td>
<td>0.1</td>
</tr>
<tr>
<td>Cubic Centimeters</td>
<td>cubic feet (U.S.)</td>
<td>$3.5314 \times 10^5$</td>
</tr>
<tr>
<td>Cubic Centimeters</td>
<td>cubic inches (U.S.)</td>
<td>0.0610</td>
</tr>
<tr>
<td>Cubic Centimeters</td>
<td>gallons (U.S.)</td>
<td>$2.6417 \times 10^{-4}$</td>
</tr>
<tr>
<td>Cubic Centimeters</td>
<td>milliliters</td>
<td>0.999972</td>
</tr>
<tr>
<td>Cubic Centimeters</td>
<td>ounces (U.S., fluid)</td>
<td>0.0338</td>
</tr>
<tr>
<td>Cubic Centimeters</td>
<td>pints (U.S., liquid)</td>
<td>0.0021</td>
</tr>
<tr>
<td>Cubic Centimeters</td>
<td>quarts (U.S., liquid)</td>
<td>0.0011</td>
</tr>
<tr>
<td>Cubic Feet (U.S.)</td>
<td>cubic centimeters</td>
<td>28316.847</td>
</tr>
<tr>
<td>Cubic Feet (U.S.)</td>
<td>liters</td>
<td>28.317</td>
</tr>
<tr>
<td>Cubic Feet (U.S.)</td>
<td>quarts (U.S., liquid)</td>
<td>29.922</td>
</tr>
<tr>
<td>Cubic ft. of water (60˚F)</td>
<td>pounds</td>
<td>62.37</td>
</tr>
<tr>
<td>Cubic inches (U.S.)</td>
<td>cubic centimeters</td>
<td>16.3872</td>
</tr>
<tr>
<td>Cubic inches (U.S.)</td>
<td>cubic feet (U.S.)</td>
<td>$5.8780 \times 10^{-4}$</td>
</tr>
<tr>
<td>Cubic meters</td>
<td>cubic feet (U.S.)</td>
<td>35.3147</td>
</tr>
<tr>
<td>Cubic meters</td>
<td>cubic inches (U.S.)</td>
<td>$61023.74$</td>
</tr>
<tr>
<td>Degrees</td>
<td>circles</td>
<td>0.0028</td>
</tr>
<tr>
<td>Drams (apothecaries or troy)</td>
<td>drams (avoirdupois)</td>
<td>2.1943</td>
</tr>
<tr>
<td>Drams (avoirdupois)</td>
<td>drams (apothecaries Or troy)</td>
<td>0.4557</td>
</tr>
<tr>
<td>Drams (avoirdupois)</td>
<td>grains</td>
<td>27.34375</td>
</tr>
<tr>
<td>Drams (avoirdupois)</td>
<td>grams</td>
<td>1.7718</td>
</tr>
<tr>
<td>Drams (avoirdupois)</td>
<td>ounces(avoirdupois)</td>
<td>0.0625</td>
</tr>
<tr>
<td>Drams (avoirdupois)</td>
<td>pounds(avoirdupois)</td>
<td>0.003906</td>
</tr>
<tr>
<td>Drams (U.S.,fluid)</td>
<td>cubic centimeters</td>
<td>3.6967</td>
</tr>
<tr>
<td>Drams (U.S. fluid)</td>
<td>ounces (fluid)</td>
<td>0.125</td>
</tr>
<tr>
<td>Feet (U.S. Survey)</td>
<td>centimeters</td>
<td>30.4801</td>
</tr>
<tr>
<td>Foot-pounds</td>
<td>btu (mean)</td>
<td>0.0012841</td>
</tr>
<tr>
<td>Gallons (U.S.)</td>
<td>cubic centimeters</td>
<td>3785.412</td>
</tr>
<tr>
<td>Gallons (U.S.)</td>
<td>cubic feet</td>
<td>1.337</td>
</tr>
<tr>
<td>Gallons (U.S.)</td>
<td>gallons (British)</td>
<td>0.8327</td>
</tr>
<tr>
<td>Gallons (U.S.)</td>
<td>liters</td>
<td>3.78541</td>
</tr>
<tr>
<td>Gallons (U.S.)</td>
<td>mins</td>
<td>61440</td>
</tr>
<tr>
<td>Gallons (U.S.)</td>
<td>ounces (U.S. fluid)</td>
<td>128</td>
</tr>
<tr>
<td>Gallons (U.S.)</td>
<td>pounds (avoirdupois)</td>
<td>8.328</td>
</tr>
<tr>
<td>Of water at 60˚F</td>
<td></td>
<td>1 x 10^7</td>
</tr>
<tr>
<td>Grains</td>
<td>drams (avoirdupois)</td>
<td>0.03657</td>
</tr>
<tr>
<td>Grains</td>
<td>grams</td>
<td>0.0648</td>
</tr>
<tr>
<td>Grains</td>
<td>drams (avoirdupois)</td>
<td>0.5644</td>
</tr>
<tr>
<td>Grams</td>
<td>grains</td>
<td>15.4324</td>
</tr>
<tr>
<td>Grams</td>
<td>ounces (avoirdupois)</td>
<td>0.0353</td>
</tr>
<tr>
<td>Grams</td>
<td>pounds (avoirdupois)</td>
<td>0.0022</td>
</tr>
<tr>
<td>Horsepower</td>
<td>btu (mean)/hour</td>
<td>2542.48</td>
</tr>
<tr>
<td>Horsepower</td>
<td>calories, kg (mean)/ min</td>
<td>10.688</td>
</tr>
<tr>
<td>Horsepower</td>
<td>kilowatts</td>
<td>0.7457</td>
</tr>
<tr>
<td>Horsepower</td>
<td>watts</td>
<td>745.7</td>
</tr>
<tr>
<td>Inches (U.S.)</td>
<td>centimeters</td>
<td>2.5400</td>
</tr>
<tr>
<td>Inches (U.S.)</td>
<td>millimeters</td>
<td>25.4001</td>
</tr>
<tr>
<td>Joules (abs)</td>
<td>calories, gram(mean)</td>
<td>0.23866</td>
</tr>
<tr>
<td>Joules (abs)</td>
<td>ergs</td>
<td>1 x 10^7</td>
</tr>
<tr>
<td>Kilograms</td>
<td>pounds(avoirdupois)</td>
<td>2.2046</td>
</tr>
<tr>
<td>Kilowatts (abs)</td>
<td>btu (mean)/hr.</td>
<td>3409.52</td>
</tr>
<tr>
<td>Liters</td>
<td>cubic centimeters</td>
<td>1000</td>
</tr>
<tr>
<td>Liters</td>
<td>gallons (U.S.)</td>
<td>0.2642</td>
</tr>
<tr>
<td>Liters</td>
<td>ounces (U.S., fluid)</td>
<td>33.8140</td>
</tr>
<tr>
<td>Liters</td>
<td>pints (U.S., liquid)</td>
<td>2.11337</td>
</tr>
<tr>
<td>Meters</td>
<td>feet (U.S.)</td>
<td>3.2808</td>
</tr>
<tr>
<td>Meters</td>
<td>inches (U.S.)</td>
<td>39.37</td>
</tr>
<tr>
<td>Microns</td>
<td>centimeters</td>
<td>$1 \times 10^{-4}$</td>
</tr>
<tr>
<td>Microns</td>
<td>inches</td>
<td>$3.937 \times 10^{-5}$</td>
</tr>
<tr>
<td>Miles/Hour</td>
<td>centimeters/second</td>
<td>44.704</td>
</tr>
<tr>
<td>Miles/Hour</td>
<td>feet/second</td>
<td>1.4667</td>
</tr>
<tr>
<td>To Convert From</td>
<td>To</td>
<td>Multiply by</td>
</tr>
<tr>
<td>----------------</td>
<td>----</td>
<td>-------------</td>
</tr>
<tr>
<td>Milligrams</td>
<td>grains</td>
<td>0.01543</td>
</tr>
<tr>
<td>Milligrams</td>
<td>ounces (avoirdupois)</td>
<td>$3.5274 \times 10^{-5}$</td>
</tr>
<tr>
<td>Milligrams</td>
<td>pounds (avoirdupois)</td>
<td>$2.20462 \times 10^{-5}$</td>
</tr>
<tr>
<td>Milliliters</td>
<td>cubic centimeters</td>
<td>1.0000</td>
</tr>
<tr>
<td>Milliliters</td>
<td>ounces (U.S., fluid)</td>
<td>0.0338</td>
</tr>
<tr>
<td>Milliliters</td>
<td>pints (U.S., liquid)</td>
<td>0.00211</td>
</tr>
<tr>
<td>Ounces (U.S., fluid)</td>
<td>gallons (U.S.)</td>
<td>$7.812 \times 10^{-3}$</td>
</tr>
<tr>
<td>Ounces (U.S., fluid)</td>
<td>liters</td>
<td>0.0296</td>
</tr>
<tr>
<td>Ounces (U.S., fluid)</td>
<td>milliliters</td>
<td>29.5727</td>
</tr>
<tr>
<td>Pints (U.S., liquid)</td>
<td>cubic centimeters</td>
<td>473.176</td>
</tr>
<tr>
<td>Pints (U.S., liquid)</td>
<td>cubic inches</td>
<td>28.875</td>
</tr>
<tr>
<td>Pints (U.S., liquid)</td>
<td>liters</td>
<td>0.4732</td>
</tr>
<tr>
<td>Pounds (avoirdupois)</td>
<td>grains</td>
<td>7000</td>
</tr>
<tr>
<td>Pounds (avoirdupois)</td>
<td>grams</td>
<td>453.5924</td>
</tr>
<tr>
<td>Pounds (avoirdupois)</td>
<td>pounds (troy)</td>
<td>1.2153</td>
</tr>
<tr>
<td>Pounds of water (39.2°F)</td>
<td>gallons (U.S.)</td>
<td>0.1198</td>
</tr>
<tr>
<td>Quarts (U.S., liquid)</td>
<td>cubic centimeters</td>
<td>946.353</td>
</tr>
<tr>
<td>Quarts (U.S., liquid)</td>
<td>liters</td>
<td>0.9463</td>
</tr>
<tr>
<td>Square centimeters</td>
<td>square inches (U.S.)</td>
<td>0.1550</td>
</tr>
</tbody>
</table>
Quality products, that connect with your Quality Projects.

Dudley Chemical Corporation
Dudley Chemical Corporation
Email: dudley@dudley-chem.com
US Phone: 732-886-3100
Fax Phone: 732-886-3688