Section 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Common Name/ Trade Name</th>
<th>Catalog Number(s)</th>
<th>CAS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD&amp;C Yellow 5</td>
<td>FD150</td>
<td>1934-21-0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Commercial Name(s)</th>
<th>Synonym</th>
<th>Chemical Name</th>
<th>Chemical Family</th>
<th>Chemical Formula</th>
<th>Supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248</td>
<td>Acid Yellow 23, Acid Yellow T, Atul Tartrazine, C.I. 19140, C.I. Acid Yellow 23, C.I. Acid Yellow 23 trisodium salt, Food Yellow 5, FD &amp; C Yellow No. 5 tartrazine, Tartran Yellow, Tartrazine, Tartrazine FD &amp; C Yellow #5, Yellow No. 5</td>
<td>5-hydroxy-1-(p-sulfophenyl)-4-(p-sulfophenyl)azopyrazole-3-carboxylic acid trisodium salt; Trisodium 3-carboxy-5-hydroxy-1-p-sulfophenyl-4-p-sulfophenylazopyrazole; Trisodium salt of 3-carboxy-5-hydroxy-1-sulfophenyl azopyrazole</td>
<td>Pyrazole-3-carboxylic acid, 5-hydroxy-1-(p-sulfophenyl)-4-(p-sulfophenyl)azo-, trisodium salt</td>
<td>aromatic azo-pyrazole sulphonate</td>
<td>C16-H9-N4-O9-S2Na3</td>
<td></td>
</tr>
<tr>
<td>SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 2. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) FD&amp;C Yellow 5</td>
<td>1934-21-0</td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Toxicological Data on Ingredients

ORAL (LD50): Acute: 12750 mg/kg [Mouse].

Section 3. Hazards Identification

Potential Acute Health Effects
Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects

Carcinogenic Effects: Not available.
Mutagenic Effects: Mutagenic for bacteria and/or yeast.
Teratogenic Effects: Not available.
Developmental Toxicity: Not available.
Repeated or prolonged exposure is not known to aggravate medical condition.
### Section 4. First Aid Measures

<table>
<thead>
<tr>
<th>First Aid Measures</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eye Contact</strong></td>
<td>Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.</td>
</tr>
<tr>
<td><strong>Skin Contact</strong></td>
<td>In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.</td>
</tr>
<tr>
<td><strong>Serious Skin Contact</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td>If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.</td>
</tr>
<tr>
<td><strong>Serious Inhalation</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td>Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.</td>
</tr>
<tr>
<td><strong>Serious Ingestion</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Section 5. Fire and Explosion Data

<table>
<thead>
<tr>
<th>Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flammability of the Product</strong></td>
<td>May be combustible at high temperature.</td>
</tr>
<tr>
<td><strong>Auto-Ignition Temperature</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Flash Points</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Flammable Limits</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Products of Combustion</strong></td>
<td>These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...), sulfur oxides (SO2, SO3...). Some metallic oxides.</td>
</tr>
<tr>
<td><strong>Fire Hazards in Presence of Various Substances</strong></td>
<td>Slightly flammable to flammable in presence of heat.</td>
</tr>
<tr>
<td><strong>Fire Fighting Media and Instructions</strong></td>
<td>SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.</td>
</tr>
<tr>
<td><strong>Special Remarks on Fire Hazards</strong></td>
<td>As with most organic solids, fire is possible at elevated temperatures. Material in powder form, capable of creating a dust explosion. When heated to decomposition it emits very toxic fumes of nitrogen, sulfur, and sodium oxides.</td>
</tr>
<tr>
<td><strong>Special Remarks on Explosion Hazards</strong></td>
<td>Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.</td>
</tr>
</tbody>
</table>

### Section 6. Accidental Release Measures

<table>
<thead>
<tr>
<th>Release Measures</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Small Spill</strong></td>
<td>Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.</td>
</tr>
<tr>
<td><strong>Large Spill</strong></td>
<td>Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.</td>
</tr>
</tbody>
</table>
Section 7. Handling and Storage

Precautions
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, reducing agents.

Storage
Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Engineering Controls
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection
Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Use a dust respirator if ventilation is inadequate and/or if handling of material creates visible dust clouds.

Personal Protection in Case of a Large Spill
Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits
Not available.

Section 9. Physical and Chemical Properties

Physical state and appearance
Solid.
Molecular Weight
534.37 g/mole
pH (1% soln/water)
Not available.
Boiling Point
Not available.
Melting Point
Decomposes.
Critical Temperature
Not available.
Specific Gravity
Not available.
Vapor Pressure
Not applicable.
Vapor Density
Not available.
Volatility
Not available.
Odor Threshold
Not available.
Water/Oil Dist. Coeff.
The product is more soluble in water; log(oil/water) = -10.17 (estimated)
Ionicity (in Water)
Not available.
Dispersion Properties
See solubility in water.
Solubility
Soluble in cold water, hot water.
Solubility in Water: 30 g/100 ml at 25 deg. C.
Solubility in Glycerol: 19 g/100 ml at 25 deg. C.
Solubility in Propylene Glycol: 7 g/100 ml at 25 deg. C.
Solubility in Ethanol: 0.8 mg/ml.
Soluble in concentrated sulfuric acid.

Section 10. Stability and Reactivity Data

Stability
The product is stable.
Instability Temperature
Not available.
Conditions of Instability
Excess heat, incompatible materials.
Incompatibility with various substances
Reactive with oxidizing agents, reducing agents.
Corrosivity
Non-corrosive in presence of glass.

Continued on Next Page
### Section 11. Toxicological Information

**Routes of Entry**
Inhalation. Ingestion.

**Toxicity to Animals**
Acute oral toxicity (LD$_{50}$): 12750 mg/kg [Mouse].

**Chronic Effects on Humans**
**MUTAGENIC EFFECTS:** Mutagenic for bacteria and/or yeast.

**Other Toxic Effects on Humans**
Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

**Special Remarks on Toxicity to Animals**
Not available.

**Special Remarks on Chronic Effects on Humans**
May affect genetic material (mutagenic).
May cause adverse reproductive effects and birth defects (teratogenic) based on animal test data.

**Special Remarks on other Toxic Effects on Humans**
Acute Potential Health Effects:
Skin: May cause skin irritation.
Eyes: May cause eye irritation.
Inhalation: Dust may cause respiratory tract irritation.
Ingestion: Low hazard for usual industrial handling. It may affect the peripheral nervous system (paresthesia - and musculoskeletal system (changes in teeth and supporting structures)
Chronic Potential Health Effects: Ingestion: Prolonged or repeated ingestion may affect the liver and kidneys.

### Section 12. Ecological Information

**Ecotoxicity**
Ecotoxicity in water (LC$_{50}$): 5706.6 mg/l 48 hours [Daphnia (Ceriodaphnia dubia)].

**BOD5 and COD**
Not available.

**Products of Biodegradation**
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation**
The product itself and its products of degradation are not toxic.

**Special Remarks on the Products of Biodegradation**
Not available.

### Section 13. Disposal Considerations

**Waste Disposal**
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

### Section 14. Transport Information

**DOT Classification**
Not a DOT controlled material (United States).

**Identification**
Not applicable.

**Special Provisions for Transport**
Not applicable.
Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations
- TSCA 8(b) inventory: FD&C Yellow 5
- FDA: Indirect Food Additives (21CFR 176.170 and 178.1010): Listed as FD & C Yellow No. 5
- FDA: Certified Provisionally Listed Colors for Foods, Drugs, and Cosmetics (21CFR 82.705): Listed as FD & C Yellow No. 5
- FDA: Color Additives Subject to Certification for Cosmetics (21CFR 74.2705): Listed as FD & C Yellow No. 5
- FDA: Color Additives Subject to Certification for Drugs (21CFR 74..1705): Listed as FD & C Yellow No. 5
- FDA: Color Additives Subject to Certification for Foods (21CFR 74.705): Listed as FD & C Yellow No. 5
- FDA: Everything Added to Food in the United States (EAFUS): Listed as FD & C Yellow No. 5

California Proposition 65 Warnings
- California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.
- California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations
- EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances (EINECS No. 217-699-5).
- Canada: Listed on Canadian Domestic Substance List (DSL).
- China: Listed on National Inventory.
- Japan: Listed on National Inventory (ENCS).
- Korea: Listed on National Inventory (KECI).
- Philippines: Listed on National Inventory (PICCS).
- Australia: Listed on AICS.

Other Classifications
- WHMIS (Canada): CLASS D-2B: Material causing other toxic effects (TOXIC).
- DSCL (EEC): This product is not classified according to the EU regulations.

HMIS (U.S.A.)
- Health Hazard: 1
- Fire Hazard: 1
- Reactivity: 0
- Personal Protection: C

National Fire Protection Association (U.S.A.)
- Health: 1
- Reactivity: 0
- Specific hazard

WHMIS (Canada) (Pictograms)

DSCL (Europe) (Pictograms)

TDG (Canada) (Pictograms)

ADR (Europe) (Pictograms)

Protective Equipment

Continued on Next Page
Gloves (impervious).

Synthetic apron.

Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Safety glasses.

---

**Section 16. Other Information**

<table>
<thead>
<tr>
<th>MSDS Code</th>
<th>F3075</th>
</tr>
</thead>
<tbody>
<tr>
<td>References</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other Special Considerations</td>
<td>Uses: Colorant</td>
</tr>
</tbody>
</table>

Validated by Sonia Owen on 7/11/2012.  
Verified by Sonia Owen.  
Printed 7/11/2012.

CALL (310) 516-8000

**Notice to Reader**

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user’s responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.