Material Safety Data Sheet
4,5-Dihydroxynaphthalene-2,7-disulfonic acid, disodium salt, dihydrate

MSDS# 01872

Section 1 - Chemical Product and Company Identification

MSDS Name: 4,5-Dihydroxynaphthalene-2,7-disulfonic acid, disodium salt, dihydrate
Catalog Numbers: AC155190000, AC155190250, AC155191000, AC199910000, AC199910100, AC300600000
Synonyms: 1,8-Dihydroxynaphthalene-3,6-disulfonic acid, disodium salt, dihydrate; Chromotropic acid, disodium salt, dihydrate.

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticals 3a
2440 Geel, Belgium

Company Identification: (USA)
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11
Emergency Number, Europe: +32 14 57 52 99
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

Risk Phrases:
CAS#: 5808-22-0
Chemical Name: Chromotropic acid, disodium salt, dihydrate
%: >90
EINECS#: unlisted

Text for R-phrases: see Section 16
Hazard Symbols: XI

Risk Phrases: 36/37/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Warning! May be harmful if swallowed, inhaled, or absorbed through the skin. Causes eye, skin, and respiratory tract irritation. Target Organs: Respiratory system, eyes, skin.

Potential Health Effects
Eye: Causes eye irritation.
Skin: Causes skin irritation. May be harmful if absorbed through the skin.
Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed.
Inhalation: Causes respiratory tract irritation. May be harmful if inhaled.
Chronic: No information found.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.
Skin: In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.
Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.
Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or appropriate foam.
Autoignition Temperature: Not applicable.
Flash Point: Not applicable.
Explosion Limits: Not available
NFPA Rating: health: 2; flammability: 1; instability: 0;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate Handling: ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid breathing dust.
Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromotropic acid, disodium salt, anhydrous</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
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<td>drous</td>
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<tr>
<td>Chromotropic acid, disodium salt, dihydrate</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
<tr>
<td>drate</td>
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</tbody>
</table>

OSHA Vacated PELs: Chromotropic acid, disodium salt, anhydrous: None listed Chromotropic acid, disodium salt, dihydrate: None listed

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.
Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Powder
Color: off-white to gray-beige
Odor: practically odorless
pH: Not available
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: Not available
Freezing/Melting Point: > 300 deg C (> 572.00°F)
Decomposition Temperature: Not available
Solubility in water: Soluble
Specific Gravity/Density:
Molecular Formula: C10H6O8S2Na2.2H2O
Molecular Weight: 400.28

Section 10 - Stability and Reactivity

Chemical Stability:
Conditions to Avoid: Dust generation, excess heat, excess light.
Incompatibilities with Other Materials Strong oxidizing agents, acid chlorides, acid anhydrides.
Hazardous Decomposition Products Carbon monoxide, oxides of sulfur, carbon dioxide, sodium oxide.
Hazardous Polymerization Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 129-96-4: None listed
CAS# 5808-22-0: None listed
LD50/LC50: RTECS: Not available. RTECS: Not available.
Chromotropic acid, disodium salt, anhydrous - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Chromotropic acid, disodium salt, dihydrate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: Not regulated
Hazard Class:
UN Number:
Packing Group:
Canada TDG
Shipping Name: Not regulated as a hazardous material
Hazard Class:
Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI

Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection)

CAS# 129-96-4: 1
CAS# 5808-22-0: Not available

Canada

CAS# 129-96-4 is listed on Canada's DSL List
Canadian WHMIS Classifications: D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 129-96-4 is not listed on Canada's Ingredient Disclosure List.
CAS# 5808-22-0 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 129-96-4 is listed on the TSCA Inventory.

CAS# 5808-22-0 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the Inventory (40CFR720.3(u)(2)).

REVIEWED

Section 16 - Other Information

MSDS Creation Date: 9/02/1997
Revision #7 Date 7/20/2009

DATE: July 31, 2012

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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