Material Safety Data Sheet
2,3-Dihydroxynaphthalene

MSDS# 28432

Section 1 - Chemical Product and Company Identification

MSDS Name: 2,3-Dihydroxynaphthalene
Catalog Numbers: AC115020000, AC115020500, AC115022500
Synonyms: 2,3-Naphthalenediol.

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

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

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

Section 2 - Composition, Information on Ingredients

CAS#: 92-44-4
Chemical Name: 2,3-Dihydroxynaphthalene
%: 98
EINECS#: 202-156-7

Hazard Symbols: XN

Risk Phrases: 22 36/37/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Warning! Harmful if swallowed. 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: Harmful if swallowed. May cause irritation of the digestive tract.
Inhalation: Causes respiratory tract irritation. May be harmful if inhaled.
Chronic: No information found.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Do not induce vomiting. Get medical aid immediately. Call a poison control center.

Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

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.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Autoignition Temperature: > 330 deg C (> 626.00 deg F)

Flash Point: 175 deg C (347.00 deg F)

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. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.

Storage: Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
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<tbody>
<tr>
<td>2,3-Dihydroxynaphthalene</td>
<td>None listed</td>
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OSHA Vacated PELs: 2,3-Dihydroxynaphthalene: 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.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a Respirators: NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Crystalline powder
Color: white - pink  
Odor: Not available  
P pH: 6 (1 g/L aq.sol.)  
Vapor Pressure: 0.8 hPa @ 149 deg C  
Vapor Density: Not available  
Evaporation Rate: Not available  
Viscosity: Not available  
Boiling Point: Not available  
Freezing/Melting Point: 162 - 166 deg C  
Decomposition Temperature: Not available  
Solubility in water: slightly soluble  
Specific Gravity/Density:  
Molecular Formula: C10H8O2  
Molecular Weight: 160.17  
Section 10 - Stability and Reactivity  
Chemical Stability: Stable under normal temperatures and pressures.  
Conditions to Avoid: Incompatible materials, dust generation, excess heat.  
Incompatibilities with Other Materials: Not available  
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.  
Hazardous Polymerization: Has not been reported.  
Section 11 - Toxicological Information  
RTECS#: CAS# 92-44-4: QJ4750000  
LD50/LC50: RTECS: Not available.  
Carcinogenicity: 2,3-Dihydroxynaphthalene - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.  
Other: See actual entry in RTECS for complete information.  
Section 12 - Ecological Information  
Other: Do not empty into drains.  
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 as a hazardous material  
Hazard Class:  
UN Number:  
Packing Group:  
Canada TDG  
Shipping Name: Not available  
Hazard Class:  
UN Number:  
Packing Group:  
Section 15 - Regulatory Information  
European/International Regulations  
European Labeling in Accordance with EC Directives  
Hazard Symbols: XN  
Risk Phrases:  
R 22 Harmful if swallowed.  
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# 92-44-4: 2

Canada
CAS# 92-44-4 is listed on Canada's DSL List
Canadian WHMIS Classifications: D1B, 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# 92-44-4 is not listed on Canada's Ingredient Disclosure List.

US Federal
TSCA
CAS# 92-44-4 is listed on the TSCA
Inventory.

Section 16 - Other Information
MSDS Creation Date: 9/02/1997
Revision #5 Date 7/20/2009

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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