Material Safety Data Sheet

Acenaphthene

MSDS# 95363

Section 1 - Chemical Product and Company Identification

MSDS Name: Acenaphthene
Catalog Numbers: AC102180000, AC102180010, AC102180050, AC102181000, AC201340000, AC201340050, AC201340050, AC201341000
Synonyms: 1,8-Ethlenenaphthalene; 1,2-Dihydroacenaphthylene; Naphthyleneethylene; peri-Ethlenenaphthalene; Ethlenenaphthalene; a tricyclic aromatic hydrocarbon that occurs in coal tar.

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticaalaa 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
CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#: 83-32-9
Chemical Name: Acenaphthene
%: >96
EINECS#: 201-469-6

Hazard Symbols: XN

Risk Phrases: 22 36/37/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

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

Potential Health Effects
Eye: Causes eye irritation.
Skin: Causes skin irritation.
Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed.
Inhalation: Causes respiratory tract irritation. May be harmful if inhaled.
Chronic: Chronic exposure may cause liver damage. Chronic exposure may cause lung damage.

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: > 450 deg C (> 842.00 deg F)
Flash Point: 125 deg C (257.00 deg F)

Explosion Limits:
Lower: Not available
Upper: 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. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. 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>Acenaphthene</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: Acenaphthene: 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 and chunks
Color: brown
Odor: Not available
pH: Not applicable
Vapor Pressure: 0.00207 hPa @ 25 deg C
Vapor Density: 5.32 (air=1)
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: 279 deg C (534.20°F)
Freezing/Melting Point: 90-95 deg C
Decomposition Temperature: Not available
Solubility in water: Insoluble
Specific Gravity/Density: 1.15 @ 20°C
Molecular Formula: C12H10
Molecular Weight: 154.21

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Dust generation, excess heat.
Incompatibilities with Other Materials: Not available
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 83-32-9: AB1000000
LD50/LC50: RTECS: Not available. Other: Oral LD50 rat: 1700 mg/kg.
Carcinogenicity: Acenaphthene - IARC: Group 3 (not classifiable)
Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Fish: Bluegill/Sunfish: LC50 =1.7 mg/L; 96 Hr; Static bioassay
Water flea Daphnia: EC50 =41.2 mg/L; 48 Hr; Unspecified
Bacteria: Phytobacterium phosphoreum: EC50 =0.58-0.93 mg/L; 15 min; Microtox test at 15°C
Fish: Fathead Minnow: LC50 =1.6 mg/L; 96 Hr; Flow-through at 22.9°C (pH 7.5-7.6)
Fish: Rainbow trout: LC50 =0.67 mg/L; 96 Hr
Other: Dangerous to aquatic life in high concentrations.

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:
UN Number:
Packing Group:

USA RQ: CAS# 83-32-9: 100 lb final RQ; 45.4 kg final RQ

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# 83-32-9: Not available

Canada
CAS# 83-32-9 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# 83-32-9 is listed on Canada's Ingredient Disclosure List

US Federal
TSCA
CAS# 83-32-9 is listed on the TSCA
Inventory.

Section 16 - Other Information
MSDS Creation Date: 5/10/1999
Revision #6 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available
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