Material Safety Data Sheet
Acetonitrile-d3

MSDS# 95505

Section 1 - Chemical Product and Company Identification

MSDS Name: Acetonitrile-d3
Catalog Numbers: AC166230000, AC166230050, AC166230100, AC166230250, AC166230500, AC166232500, AC166232500, AC214520050, AC214530000, AC214530050, AC214530100, AC214530250, AC214530500, AC217290000, AC217290100, AC320650000, AC320650075, AC320660000, AC320660075, AC325410000, AC325410100, AC325410100, AC351390000, AC351390100, AC38986000

Synonyms: Acros Organics BVBA
Company Identification: Janssen Pharmaceuticalaan 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

CAS#: 2206-26-0
Chemical Name: Acetonitrile-d3
%
EINECS#: 218-616-5

Hazard Symbols: XN F
Risk Phrases: 11 20/21/22 36

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Not available Target Organs: Kidneys, heart, central nervous system, liver, lungs, respiratory system, gastrointestinal system, cardiovascular system, red blood cells, skin.

Potential Health Effects

Eye: Causes eye irritation.

Skin: Causes skin irritation. Harmful if absorbed through the skin. May cause dermatitis.
Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood),
convulsions, and death. May cause effects similar to those for inhalation exposure. May cause central nervous system depression.

Harmful if inhaled. May cause methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), convulsions, tachycardia, dyspnea (labored breathing), and death. Causes irritation of mucous membrane. Aspiration may lead to pulmonary edema. Vapors may cause dizziness or suffocation. Causes upper respiratory tract irritation. Inhalation may lead to dizziness, weakness, and drowsiness, leading to stupor, unconsciousness, and even death. Inhalation may lead to hematemesis, convulsions, shock, coma, and possible death.

Prolonged or repeated skin contact may cause dermatitis. Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion. May cause liver and kidney damage. May be metabolized to cyanide which in turn acts by inhibiting cytochrome oxidase impairing cellular respiration. Chronic exposure may cause dizziness, dry throat, sleepiness, anorexia, and nausea.

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 immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician: Exposure should be treated as a cyanide poisoning. Effects may be delayed. May be partially metabolized to cyanide in the body. For methemoglobinemia, administer oxygen alone or with Methylene Blue depending on the methemoglobin concentration in the blood.

Antidote: Always have a cyanide antidote kit on hand when working with cyanide compounds. Get medical advice to use. The combination of sodium thiosulfate and hydroxy cobalamin has been used as an effective antidote.

Section 5 - Fire Fighting Measures

General Information: The combination of sodium thiosulfate and hydroxy cobalamin has been used as an effective antidote. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Flammable liquid and vapor. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated.

Extinguishing Media: Use water spray to cool fire-exposed containers. Use foam, dry chemical, or carbon dioxide.

Autoignition Temperature: 525 deg C (977.00 deg F)
Flash Point: 2 deg C (35.60 deg F)
Explosion Limits: Lower: 3 Vol %
Explosion Limits: Upper: 6 Vol %
NFPA Rating: health: 2; flammability: 3; instability: 0;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do not use combustible materials such as sawdust. Use a spark-proof tool. Provide ventilation.

Section 7 - Handling and Storage

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Do not breathe dust, mist, or vapor. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or
vapor), and can be dangerous. Take precautionary measures against static discharges. Keep away from heat, sparks and flame. Do not ingest or inhale. Use and store under nitrogen. Use only in a chemical fume hood. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.


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>Acetonitrile-d3</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
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OSHA Vacated PELs: Acetonitrile-d3: None listed

Engineering Controls:

Use explosion-proof ventilation equipment. 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 chemical splash goggles.

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: Clear liquid
Color: colorless
Odor: aromatic odor - sweetish odor
pH: Not available
Vapor Pressure: 97mbar @20 deg C
Vapor Density: 1.42 (Air=1)
Evaporation Rate: 5.79 (Butyl acetate=1)
Viscosity: 0.39 cP @20 deg C
Boiling Point: 79 - 81 deg C @760mmHg
Freezing/Melting Point: -46 deg C (-50.80°F)

Decomposition Temperature: Not available
Solubility in water: Miscible
Specific Gravity/Density: 0.844
Molecular Formula: C2D3N
Molecular Weight: 44.07

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, ignition sources, excess heat, exposure to moist air or water.

Incompatibilities with Other Materials: Not available
Hazardous Decomposition Products: Hydrogen cyanide, nitrogen oxides, carbon monoxide, carbon dioxide.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 2206-26-0: None listed
LD50/LC50: RTECS: Not available.
Carcinogenicity: Acetonitrile-d3 - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: Mutagenicity: Ames-test: negative. The toxicological properties have not been fully investigated.
Section 12 - Ecological Information

Other: No information 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: ACETONITRILE
Hazard Class: 3
UN Number: UN1648
Packing Group: II

Canada TDG
Shipping Name: ACETONITRILE
Hazard Class: 3
UN Number: UN1648
Packing Group: II

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives
- Hazard Symbols: XN F
- Risk Phrases:
  - R 11 Highly flammable.
  - R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
  - R 36 Irritating to eyes.
- Safety Phrases:
  - S 16 Keep away from sources of ignition - No smoking.
  - S 36/37 Wear suitable protective clothing and gloves.

WGK (Water Danger/Protection)
- CAS# 2206-26-0: Not available

Canada

Canadian WHMIS Classifications: B2, 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# 2206-26-0 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA
- CAS# 2206-26-0 is not listed on the TSCA Inventory. It is for research and development use only.

Section 16 - Other Information

MSDS Creation Date: 8/25/1998
Revision #6 Date 7/20/2009

Reviewed 2013.07.04 14:33:18 -04'00'

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.