Material Safety Data Sheet
Propionitrile, 99%

MSDS# 32762

Section 1 - Chemical Product and Company Identification

MSDS Name: Propionitrile, 99%
Catalog Numbers: AC180890000, AC180890050, AC180891000, AC180895000
Synonyms: Cyanoethane; Ethyl cyanide; Hydrocyanic ether; Propionic nitrile.

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

Company Identification: 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#: 107-12-0
Chemical Name: Propionitrile
%: 99
EINECS#: 203-464-4

Hazard Symbols: T F
Risk Phrases: 11 23/24/25

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Flammable liquid and vapor. May be fatal if swallowed. Harmful if absorbed through skin or inhaled. Causes eye, skin, and respiratory tract irritation. Target Organs: Respiratory system, eyes, skin.

Potential Health Effects

Eye: Vapors cause eye irritation.
Skin: Causes skin irritation. Harmful if absorbed through the skin.
Ingestion: May be fatal if swallowed. Contains cyanide.
Inhalation: Harmful if inhaled. Vapors may cause dizziness or suffocation. Vapor or mist is irritating to the mucous membranes and upper respiratory tract.
Chronic: May cause cyanosis - a blue-gray coloring of the skin and lips caused by a lack of oxygen. Massive doses may produce, without warning, sudden loss of consciousness and prompt death from respiratory arrest.

Section 4 - First Aid Measures
Eyes: 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. Wash clothing before reuse.

Ingestion: Do not 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. Do NOT use mouth-to-mouth resuscitation. Administer oxygen. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician: Treat symptomatically and supportively.

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 hydroxycobalamin has been used as an effective antidote.

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. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Containers may explode in the heat of 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.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Do NOT use water directly on fire. Use water spray to cool fire-exposed containers. Use foam, dry chemical, or carbon dioxide. Water may be ineffective. Do NOT use straight streams of water. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Autoignition Temperature: 510 deg C (950.00 deg F)
Flash Point: 6 deg C (42.80 deg F)
Explosion Limits: Lower: 3.10 vol %
Explosion Limits: Upper: .00 vol %
NFPA Rating: health: 4; flammability: 3; instability: 1;

Section 6 - Accidental Release Measures

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

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

Section 7 - Handling and Storage

Handling: 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. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Do not get on skin or in eyes. Do not ingest or inhale. Use with adequate ventilation. Wash clothing before reuse. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

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>Propionitrile</td>
<td>none listed</td>
<td>6 ppm TWA; 14</td>
<td>none listed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mg/m3 TWA</td>
<td></td>
</tr>
</tbody>
</table>
OSHA Vacated PELs: Propionitrile: None listed

Engineering Controls:
Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Exposure Limits

Personal Protective Equipment

Eyes: Wear chemical splash goggles.
Skin: Wear appropriate gloves to prevent skin exposure.
Clothing: Wear appropriate clothing to prevent skin exposure.
Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a 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: Liquid
Color: clear, colorless
Odor: Pleasant, ethereal-sweetish odor
pH: Not available
Vapor Pressure: 40 mm Hg @ 23 deg C
Vapor Density: 1.9 (air=1)
Evaporation Rate: Not available
Viscosity: 0.44 mPas 20 deg C
Boiling Point: 97 deg C @ 760 mm Hg (206.60°F)
Freezing/Melting Point: -93 deg C (-135.40°F)
Decomposition Temperature: Not available
Solubility in water: Soluble
Specific Gravity/Density: .7720 g/cm3
Molecular Formula: C3H5N
Molecular Weight: 55.08

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Ignition sources, excess heat.
Incompatibilities with Other Materials: Strong oxidizing agents, strong reducing agents, strong acids, strong bases.
Hazardous Decomposition Products: Hydrogen cyanide, nitrogen oxides, carbon monoxide, carbon dioxide.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 107-12-0: UF9625000

RTECS:

CAS# 107-12-0: Draize test, rabbit, eye: 100 mg/24H Moderate;
Draize test, rabbit, skin: 500 mg/24H Mild;
Inhalation, mouse: LC50 = 163 ppm/1H;

LD50/LC50:
Oral, mouse: LD50 = 35797 ug/kg;
Oral, rat: LD50 = 39 mg/kg;
Skin, rabbit: LD50 = 210 uL/kg;

Other:
Carcinogenicity: Propionitrile - 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
Section 13 - Disposal Considerations

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

Section 14 - Transport Information

US DOT
Shipping Name: PROPIONITRILE
Hazard Class: 3
UN Number: UN2404
Packing Group: II
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

USA RQ: CAS# 107-12-0: 10 lb final RQ; 4.54 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T F
Risk Phrases:
R 11 Highly flammable.
R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

Safety Phrases:
S 9 Keep container in a well-ventilated place.
S 16 Keep away from sources of ignition - No smoking.
S 27 Take off immediately all contaminated clothing.
S 33 Take precautionary measures against static discharges.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 107-12-0: 1

Canada

CAS# 107-12-0 is listed on Canada's DSL List
Canadian WHMIS Classifications: B2, D1A
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# 107-12-0 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 107-12-0 is listed on the TSCA
Inventory.

Section 16 - Other Information

MSDS Creation Date: 12/08/1998
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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