**MATERIAL SAFETY DATA SHEET**

**Product Name:** Propionic acid, 99%

**Catalog Number:** H80046386

**ACN:** B82399066

**PAGE:** 1

**SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**MSDS Name:** Propionic acid, 99%

**CAS:** 123-98-5

**Synonyms:** Carboxylic acid; Propionic acid; Propionic acid, 99%

**Company Identification (USA):**

Janssen Pharmaceutica, 351 Washingtonia Drive, East Hanover, NJ 07936

**Company Identification (Europe):**

444,000 001, Belgium

**For information in North America, call:** 1-800-234-5678

**For information in Europe, call:** 0031 (0) 1 147 7229

**For emergencies in Europe, call:** 0031 (0) 1 147 7229

**SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Percentage by Mass</th>
<th>%</th>
<th>EINECS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>99</td>
<td></td>
<td>201-176-3</td>
</tr>
</tbody>
</table>

**Risk Phrases:** 34

**SECTION 3 - HAZARDS IDENTIFICATION**

**Appearance:** Colorless, oily liquid clear liquid. Flash Point: 51% Cl. C. 

**Skin:** Harmful if absorbed through the skin. Causes severe skin irritation and burns.

**Inhalation:** May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and sensitization of the respiratory tract. Causes chemical burns to the eyes.

**Eye:** Prolonged or repeated skin contact may cause dermatitis. Laboratory experiments have resulted in mutagenic effects.

**SECTION 4 - FIRST AID MEASURES**

**Eyes:** Get medical aid immediately. Do not allow victim to rub or keep eyes closed. Extreme irritation with water is required (at least 15 minutes).

**Skin:** Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing. Wash clothing before reuse. Destroy contaminated clothes.

**Inhalation:** Do not induce vomiting. If victim is conscious and alert, give 2-4 cupsful of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**SECTION 5 - FIRE FIGHTING MEASURES**

**General Information:** As a dry powder, wear a self-contained breathing apparatus with a pressure-demand mask. Use non-conductive tools and equipment. Vapors may be found in an explosive atmosphere with air. Vapors may be found in an explosive atmosphere with air. Vapors may be toxic by inhalation. May be irritating to the respiratory system, eyes, and skin. No thermal decomposition or combustion. Will burn if involved in a fire. May be hazardous if exposed to heat. Containers may explode in the heat of a fire. Flammable liquid and vapor. Vapors may be heavier than air. They are not conducive to extinguishing with water. Water may be ineffective. Do not use straight streams of water. Use foam. Autoignition Temperature: 513° C (955° F)

**Flash Point:** 51% C (123.8° F)

**Explosion Limits:** 2.9 vol %, lower; 12.1 vol %

**NFPA Rating:** Health: 3; Flammability: 2; Instability: 0

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

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

**Spills/Leaks:** Use water spray to dilute spoil to a non-flammable mixture. Large spills should be neutralized with a commercial alkaline solution of water and sodium hydroxide (NaOH). Do not use water spray to keep fire-destroyed containers. Spilled containers should be carefully collected and disposed of by a professional hazardous waste disposal company.

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring or dispensing. Do not re-heat spills or contaminated equipment. Do not mix with other chemicals. Keep separate from incompatible materials. Keep container tightly closed. Avoid contact with heat, sparks, and flame. Sparking devices must be grounded. Use appropriate respiratory equipment in confined areas.

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

**SECTION 7 - HANDLING AND STORAGE**

**Engineering Controls:** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an efficient exhaust system. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Exposure Limits:**

<table>
<thead>
<tr>
<th>Exposure Limits</th>
</tr>
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<tbody>
<tr>
<td>OSHA Vacated PELs</td>
</tr>
<tr>
<td>Propionic acid</td>
</tr>
<tr>
<td>10 ppm TWA; 30 ppm TLV</td>
</tr>
</tbody>
</table>

**OSHA - Final PELs**

**OSHA Vacated PELs**

**Personal Protective Equipment**

<table>
<thead>
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<tbody>
<tr>
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**OSHA - Final PELs**

**OSHA Vacated PELs**

**PERSONAL PROTECTIVE EQUIPMENT**

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**OSHA - Final PELs**

**OSHA Vacated PELs**

**SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

**Engineering Controls:** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an efficient exhaust system. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Exposure Limits:**

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**WARNING:**

Wear chemical goggles. Wear appropriate protective gloves 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 146 must be followed whenever workplace conditions warrant a respirator's use.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State:**
- Clear liquid
- Colorless, oily liquid
- Fugid odor - pungent odor
- Acidic
- Specific Gravity: 2.56

**Vapor Pressure:**
- 0.000 kPa @ 20 deg C
- Liquefied: Not available.

**Melting Point:**
- 1175 deg C

**Boiling Point:**
- 141 deg C

**Vapor Density:**
- 900 mg/L

**Specific Gravity:**
- 1.0

**Molecular Weight:**
- 124.12

**SECTION 10 - STABILITY AND REACTIVITY**

**Chemical Stability:**
- Stable under normal temperatures and pressures. Conditions to Avoid:
  - Ignition source, excess heat.

**Incompatibilities with Other Materials:**
- Strong oxidizers, strong bases, steel.

**Hazardous Decomposition Products:**
- Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

**Hazardous Polymerization:**
- Will not occur.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

**RTECS:**
- CAS 79-09-4: US9590000

**LD50/LC50:**
- CAS 79-09-4: Draize test, rabbit, eye: 990 mg Severe; Oral, rat:
  - LD50 = 2600 mg/kg, 96 hr; Lethal: LC50 = 990 mg/L.

**Carcinogenicity:**
- Propionic acid - Not listed by ACGIH, IARC, HIOS, NTP, or OSHA.

**Epidemiology:**
- No information available.

**Teratogenicity:**
- No information available.

**Reproductive Effects:**
- No information available.

**Neurotoxicity:**
- No information available.

**Mutagenicity:**
- In vitro: Chromatid exchange: Human, lymphocyte, 2500 umol/L.

**Other Studies:**
- Take precaut. open test: Administration onto the skin (rabbit): 495 mg/Severe.

**SECTION 12 - ECOLOGICAL INFORMATION**

**Ecotoxicity:**
- Water fish: Daphnia: TLM = 110 mg/L; 24 hr; unspecified fish: Fathead minnows: LC50 = 4740 mg/L; 96 hr; Plow through bioassay at 24.7 60 ppt methanol.

**Volatilization:**
- Propionic acid is subject to dry distillation and is expected, especially when present in high concentrations or supersaturated solutions. The hydronitrogen, photolysis and bioconcentration of propionic acid are not expected to be important fate processes.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

**Chemical waste generators must determine if the material is to be classified as a hazardous waste.**

**EPA guidelines for the classification determination are listed in the local hazardous waste regulations to ensure complete and accurate EPA designation.**

**RA Series:**
- None listed.
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 way shall the company be liable for any claims, losses, or damages of any third party, howsoever arising, even if the company has been advised of the possibility of such damages.