Material Safety Data Sheet
Propionaldehyde, 97%

Section 1 - Chemical Product and Company Identification

MSDS Name: Propionaldehyde, 97%
Catalog Numbers: 13151-0000, 13151-0010, 13151-0025, 13151-0250
Synonyms: Propanal

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticaan 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# Chemical Name: % EINECS#
123-38-6 Propionaldehyde 97% 204-623-0

Hazard Symbols: XI F
Risk Phrases: 11 36/37/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Highly flammable. Irritating to eyes, respiratory system and skin. Air sensitive.

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

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.
Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion: Get medical aid. Wash mouth out with water.
Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
Notes to Physician: Treat symptomatically and supportively.

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. Will burn if involved in a fire. Flammable liquid and vapor.
Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

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. Remove all sources of ignition. Use a spark-proof tool.

Section 7 - Handling and Storage
Handling: Use spark-proof tools and explosion proof equipment. Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

Section 8 - Exposure Controls, Personal Protection
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
CAS# 123-38-6:
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 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: stench
pH: Not available

Vapor Pressure: 330 hPa @ 20 deg C
Viscosity: 0.6 mPa.s @ 20 deg C

Boiling Point: 48 deg C @ 760.00mm Hg (118.40°F)
Freezing/Melting Point: 81 deg C (177.80°F)
Autoignition Temperature: 190 deg C (374.00 deg F)
Flash Point: -40 deg C (-40.00 deg F)

Explosion Limits: Lower: 2.9 vol %
Explosion Limits: Upper: 17 vol %

Decomposition Temperature: Not available

Solubility in water: 540 g/l water (20°C)
Specific Gravity/Density: 0.798g/cm3
Molecular Formula: C2H5CHO
Molecular Weight: 58.08

Section 10 - Stability and Reactivity

Chemical Stability: May form explosive peroxides on prolonged storage.
Conditions to Avoid: Incompatible materials, exposure to air.

Incompatibilities with Other Materials: Oxidizing agents, reducing agents, strong bases.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

Hazardous Polymerization: May occur.

Section 11 - Toxicological Information

RTECS#: CAS# 123-38-6: UE0350000

RTECS:

**CAS# 123-38-6**: Dermal, guinea pig: LD50 = 10 mL/kg;
Draize test, rabbit, eye: 41 mg Severe;
Draize test, rabbit, eye: 20 mg/24H Moderate;
Inhalation, mouse: LC50 = 21800 mg/m3/2H;

LD50/LC50: Inhalation, mouse: LC50 = 21800 mg/m3/2H;
Oral, rat: LD50 = 1410 mg/kg;
Oral, rat: LD50 = 1410 mg/kg;
Skin, rabbit: LD50 = 2460 mg/kg;

Propionaldehyde - 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

Ecotoxicity: Fish: Leuciscus idus: LC50: 100 - 1000 mg/l; 48H; .
Fish: Pimephals prome: LC50: 14 mg/l; 96H; .

Ecotoxicity: Daphnia: EC50: 88.7 mg/l; 48H; .
Algae: EC50: 260 mg/l; 72H; .

Other: Biodegradable. 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

<table>
<thead>
<tr>
<th>IATA</th>
<th>IMO</th>
<th>RID/ADR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping Name:</td>
<td>PROPIONALDEHYDE</td>
<td>PROPIONALDEHYDE</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>UN Number:</td>
<td>1275</td>
<td>1275</td>
</tr>
<tr>
<td>Packing Group:</td>
<td>II</td>
<td>II</td>
</tr>
</tbody>
</table>
USA RQ: CAS# 123-38-6: 1000 lb final RQ; 45.4 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI F

Risk Phrases:
  R 11 Highly flammable.
  R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:
  S 9 Keep container in a well-ventilated place.
  S 16 Keep away from sources of ignition - No smoking.
  S 29 Do not empty into drains.

WGK (Water Danger/Protection)

CAS# 123-38-6: 1

Canada

CAS# 123-38-6 is listed on Canada's DSL List

US Federal

TSCA

CAS# 123-38-6 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 7/16/1996
Revision #1 Date 5/17/2002
Revisions were made in Sections: General revision.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility 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.

--------------------------------------------------------------------------------