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

**SDS Name:** Isopropanol, HPLC Grade, 99.9%

**Company Identification (Europe):** Janssen Pharmaceuticaa 3a
2440 Geel, Belgium

**Company Identification (USA):** Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

**Emergency Numbers:**
- **Acros Organics**
- **Emergency (in Europe):** 0030 (0) 14575997
- **Emergency (in the US):** 0030 (0) 14575997

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

- **Isopropanol:** 99.9%

**SECTION 3 - HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

- **Appearance:** Colorless liquid. Flash Point: 12 deg C.
- **Health Effects:** Causes respiratory tract irritation if inhaled, eye irritation, or repeated contact causes defatting of the skin with irritation, dryness, and cracking. May cause central nervous system depression. May cause central nervous system depression causing drowsiness. May cause respiratory and central nervous system depression causing drowsiness.
- **Target Organs:** Central nervous system, respiratory system, eyes, skin.

**Potential Health Effects**

- **Skin:** Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage. May cause central nervous system depression characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal.
- **Inhalation:** Inhalation of high concentrations may cause central nervous system depression characterized by nausea, headache, dizziness, unconsciousness and loss of consciousness in high concentrations. Dizziness, upper respiratory tract irritation. Inhalation of vapors may cause drowsiness and dizziness.
- **Eye:** Causes burning sensation, redness, tearing, inflammation, and possible corneal injury. May cause transient corneal injury.
- **Ingestion:** Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage. May cause central nervous system depression characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal.

**Extinguishing Media**

- Water may be ineffective. Do not use water streams of water. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. For small fires, use carbon dioxide, dry chemical, dry sand, or alcohol-resistant foam. Cool containers with flooding quantities of water until well after fire is out.

**Autocloning Temperature:** 399 deg C (750 deg F)

**Flash Point:** 12 deg C (51.60 deg F)

**Explosion Limits:** Lower: 2.0 vol %

**Explosion Limits:** Upper: 12.7 vol %

**NFPA Rating:** 3 (Flammability: 3; Reactivity: 0)

**SECTION 4 - FIRST AID MEASURES**

**Eyes:**
- In case of contact, immediately flush eyes with plenty of water for 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 reusing. Do not use anything to remove anything from the eye of a person.

**Ingestion:**
- Potentially for aspiration if swallowed. Get medical aid immediately. Do not induce vomiting unless directed to do so by medical personnel. Give anything by mouth to a vomiting person.

**Inhalation:**
- Provided, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Urine acetone test may be helpful in diagnosis. Hemodialysis should be considered in severe intoxication. Treat symptomatically and supportive.

**SECTION 5 - FIRE FIGHTING MEASURES**

**General Information:**

- Fires: Fire suppression equipment should be used, if available. Adequate protective gear should be worn. Use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. For smaller fires, use dry chemical, dry sand, or alcohol-resistant foam. Cool containers with flooding quantities of water until well after fire is out.

**Autocloning Temperature:** 399 deg C (750 deg F)

**Flash Point:** 12 deg C (51.60 deg F)

**Explosion Limits:** Lower: 2.0 vol %

**Explosion Limits:** Upper: 12.7 vol %

**NFPA Rating:** 3 (Flammability: 3; Reactivity: 0)

**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 containers. Use water spray to dilute spill to a non-flammable mixture. Clean up spills immediately, observing proper protective equipment. Protect the environment. 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 skin with soap and water. Avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing.

**Storage:**
- Keep away from heat, sparks, and flame. Keep away from sources of ignition (e.g., electric motors, other sources of ignition, direct sunlight). Store in a cool, dry ventilated area. Do not store or use in areas where temperatures may exceed 72 deg F (22 deg C) or where temperatures may be subzero. Flammable-air. After opening, purge container with nitrogen before reusing. Use non-sparking tools. Use only with adequate ventilation. Avoid breathing vapor or mist. Do not open under pressure.

**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 general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACNIM</th>
<th>NTODH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol</td>
<td>200 ppm; 400 ppm</td>
<td>400 ppm TWA; 980 ppm IDLH</td>
<td>400 ppm TWA; 980 ppm IDLH</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:**

- 2-Propanol: 400 ppm TWA; 980 mg/m³ TWA

**Personal Protective Equipment**

- **Eyes:** Wear chemical goggles.
- **Skin:** Wear appropriate protective gloves to prevent skin exposure.
- **Clothing:** Wear appropriate protective clothing to prevent skin exposure.
- **Respirators:** Use a respiratory protection program that meets OSHA’s 29 CFR 1910.134 and ANSI S9.2.3 requirements or European Standard EN 143 must be followed whenever workplace conditions warrant a respirator’s use.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

- **Physical State:** Liquid
- **Color:** Colorless liquid
- **Odor:** Alcohol-like
- **Melting Point:** Not available
- **Boiling Point:** 82 °C at 760 mmHg
- **Refractive Index:** Not available
- **Solubility in Water:** Miscible
- **Specific Gravity/Density:** 0.7850 (water=1)
- **Vapour Pressure:** 2.27 mmHg @ 20°C
- **Vapor Density:** 5.07
- **Viscosity:** 60.09

**SECTION 10 - STABILITY AND REACTIVITY**

- **Chemical Stability:** Under normal storage conditions, peroxidizable compounds can form and accumulate peroxides which may explode when subjected to heat or shock. This material is most hazardous when peroxide levels are concentrated by distillation or evaporation. Isopropyl alcohol is susceptible to autooxidation and therefore should be classified as peroxidizable.

- **Conditions to Avoid:** Light; ignition sources; excess heat; exposure to moist air or water; incompatible substances or other materials;
- **Reactivity:** Attacks some forms of plastics, rubbers, and coatings.
- **Corrosivity:** Chlorine, monoxide, carbon dioxide, carbon bisulfide.

- **Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide.
- **Hazardous Polymerization:** Will not occur.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

- **RTTECS#**
  - CAS# 67-63-0: NT8500000
- **LD50/ LC50**
  - CAS# 67-63-0: Draize test: rabbit, eye: 100 mg; Draize test: rabbit, skin: 500 mg; LD50: 7,260 mg/kg; Inhalation: mouse; LD50: 1,200 mg/kg; Inhalation: rat; LC50: 16,000 ppm/8H; Oral: mouse; LD50: 3,600 mg/kg; Oral: rabbit; LD50: 3,600 mg/kg; Oral: rabbit; LD50: 5,000 mg/kg; Oral: rabbit; LD50: 3,600 mg/kg; Skin: rabbit; LD50: 12,800 mg/kg.

**Carcinogenicity:**

- **2-Propanol:** A4 - Not Classifiable as a Human Carcinogen

**Epidemiology:**

3,170
under the OSHA.

OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.

STATE
Propanol can be found on the following state right to know lists:
California, New Jersey, Pennsylvania, Minnesota, Massachusetts.
California No Significant Risk Level:
None of the chemicals in this product are listed.

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: Xi P
Risk Phrases:
R 11 Highly flammable.
R 36 Irritating to eyes.
R 67 Vapors may cause drowsiness and dizziness.
Safety Phrases:
S 7 Keep container tightly closed.
S 16 Keep away from sources of ignition - No smoking.
S 24/25 Avoid contact with skin and eyes. Rinse immediately with plenty of water and seek medical advice.

WGK (Water Danger/Protection)
CAS# 67-53-0:
United Kingdom Occupational Exposure Limits
CAS# 67-53-0: OEL-United Kingdom, TWA 400 ppm; STEL 500 ppm
CAS# 67-53-0: OEL-United Kingdom, STEL 500 ppm STEL, 1250 mg/m³ STEL

United Kingdom Maximum Exposure Limits
Canada
CAS# 67-53-0 is listed on Canada's OEL List.
This product has a WHMIS classification of B2, D2B.
CAS# 67-53-0 is listed on Canada's Ingredient Disclosure List.

Exposure Limits
CAS# 67-63-0: OEL-AUSTRALIA: TWA 400 ppm (980 mg/m³); STEL 500 ppm (1225 mg/m³)
CAS# 67-63-0: OEL-BELGIUM: TWA 400 ppm (985 mg/m³); STEL 500 ppm (1230 mg/m³)
CAS# 67-63-0: OEL-GERMANY: TWA 250 ppm (985 mg/m³); STEL 500 ppm (980 mg/m³); Skin
CAS# 67-63-0: OEL-JAPAN: TWA 400 ppm (980 mg/m³); STEL 500 ppm (980 mg/m³); Skin
CAS# 67-63-0: OEL-NETHERLANDS: TWA 400 ppm (980 mg/m³); STEL 500 ppm (980 mg/m³); Skin
CAS# 67-63-0: OEL-THE PHILIPPINES: TWA 400 ppm (980 mg/m³)
CAS# 67-63-0: OEL-UNITED KINGDOM: TWA 400 ppm (980 mg/m³); STEL 500 ppm; Skin
CAS# 67-63-0: OEL-UNITED STATES: TWA 400 ppm (980 mg/m³); STEL 500 ppm; Skin
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN HONG KONG, SINGAPORE, VIETNAM check ACGIH TLV

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 7/27/1999 Revision #9 Date: 10/12/2001

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 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.