Material Safety Data Sheet
Isopropylamine

MSDS# 20167

Section 1 - Chemical Product and Company Identification

MSDS Name: Isopropylamine
Catalog Numbers: AC148920000, AC148920010, AC148920025, AC148920250
Synonyms: 2-Aminopropane; 2-Propylamine; 2-Propanamine; sec-Propylamine; Monoisopropylamine.

Company Identification:
Acros Organics BVBA
Janssen Pharmaceuticaal 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#: 75-31-0
Chemical Name: Isopropylamine
%: 99
EINECS#: 200-860-9

Hazard Symbols: XI F+
Risk Phrases: 12 36/37/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Causes eye and skin burns. Causes digestive and respiratory tract burns. Harmful if swallowed, inhaled, or absorbed through the skin. Extremely flammable liquid and vapor. Vapor may cause flash fire. Target Organs: Eyes, skin, mucous membranes.

Potential Health Effects
Eye: Causes eye irritation and burns. May cause tearing, conjunctivitis and corneal edema when vapor is absorbed into the tissue of the eye. Direct contact with liquid may cause blindness or permanent eye damage.
Skin: Harmful if absorbed through the skin. Causes severe skin irritation and burns.
Ingestion: Harmful if swallowed. Causes gastrointestinal tract burns. May cause central nervous system effects.
Inhalation: Can produce delayed pulmonary edema. Causes respiratory tract irritation with possible burns.
Chronic: Prolonged or repeated skin contact may cause dermatitis.

Section 4 - First Aid Measures
**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

**Skin:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

**Ingestion:** If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

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

**Notes to Physician:** Treat symptomatically and supportively.

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**Section 5 - Fire Fighting Measures**

Evacuate area and fight fire from a safe distance. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Extremely flammable liquid and vapor. Vapor may cause flash fire. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.

**Extinguishing Media:** Use water spray, dry chemical, "alcohol resistant" foam, or carbon dioxide. Water may be ineffective because it will not cool material below its flash point.

- **Autoignition Temperature:** 402 deg C (755.60 deg F)
- **Flash Point:** -37 deg C (-34.60 deg F)
- **Explosion Limits:**
  - Lower: 2.0 vol %
  - Upper: 10.4 vol %

**NFPA Rating:**
- Health: 3
- Flammability: 4
- Instability: 0

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**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. Use water spray to cool and disperse vapors, protect personnel, and dilute spills to form nonflammable mixtures.

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

**Storage:** Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

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**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>Isopropylamine</td>
<td>5 ppm; 10 ppm</td>
<td>750 ppm IDLH</td>
<td>5 ppm TWA; 12 mg/m3 TWA</td>
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</tbody>
</table>

**OSHA Vacated PELs:** Isopropylamine: 5 ppm TWA; 12 mg/m3 TWA

**Engineering Controls:**

Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment. 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 and face shield.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing 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 149 must be followed whenever workplace conditions warrant respirator use.

**Section 9 - Physical and Chemical Properties**

**Physical State:** Liquid

**Color:** clear, colorless

**Odor:** ammonia-like

**pH:** 11.8 (0.1M aq soln)

**Vapor Pressure:** 580 mm Hg @ 25 deg C

**Vapor Density:** 2.03 (air=1)

**Evaporation Rate:** Not available

**Viscosity:** Not available

**Boiling Point:** 33-34 deg C

**Freezing/Melting Point:** -101 deg C ( -149.80°F)

**Decomposition Temperature:** Not available

**Solubility in water:** Soluble

**Specific Gravity/Density:** 0.69

**Molecular Formula:** C3H9N

**Molecular Weight:** 59.11

**Section 10 - Stability and Reactivity**

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** High temperatures, ignition sources, confined spaces.

**Incompatibilities with Other Materials** Strong oxidizing agents, strong acids.

**Hazardous Decomposition Products** Nitrogen oxides, carbon monoxide, carbon dioxide.

**Hazardous Polymerization** Will not occur.

**Section 11 - Toxicological Information**

**RTECS#:** CAS# 75-31-0; NT8400000

**RTECS:**

**CAS# 75-31-0:** Draize test, rabbit, eye: 100 uL Severe; Inhalation, rat: LC50 = 4000 ppm/4H;

**LD50/LC50:** Oral, mouse: LD50 = 2200 mg/kg; Oral, rabbit: LD50 = 3200 mg/kg; Oral, rat: LD50 = 111 mg/kg; Skin, rabbit: LD50 = 380 mg/kg;

**Carcinogenicity:** Isopropylamine - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

**Other:** Open irritation test: Administration onto the skin (rabbit) = 10 mg/24H (Severe). Open Irritation Test: Administration onto the skin (rabbit) = 345 mg (Moderate).

**Ecotoxicity:** Water flea Daphnia: EC50 = 91.5-91.6 mg/L; 48 Hr; Unspecified

**Section 12 - Ecological Information**

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

**Section 13 - Disposal Considerations**

**US DOT**

**Shipping Name:** ISOPROPYLAMINE
Hazard Class: 3
UN Number: UN1221
Packing Group: I
Canada TDG
Shipping Name: Not available

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI F+
Risk Phrases:
  R 12 Extremely flammable.
  R 36/37/38 Irritating to eyes, respiratory system and skin.
Safety Phrases:
  S 16 Keep away from sources of ignition - No smoking.
  S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  S 29 Do not empty into drains.

WGK (Water Danger/Protection)

CAS# 75-31-0: 2

Canada

CAS# 75-31-0 is listed on Canada's DSL List
Canadian WHMIS Classifications: B2, E, D1B
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# 75-31-0 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 75-31-0 is listed on the TSCA Inventory.

Section 16 - Other Information
MSDS Creation Date: 6/17/1999
Revision #6 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 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.