



Health	2
Fire	3
Reactivity	0
Personal Protection	

## Material Safety Data Sheet Diisopropylamine MSDS

### Section 1: Chemical Product and Company Identification

**Product Name:** Diisopropylamine

**Catalog Codes:** SLD2536

**CAS#:** 108-18-9

**RTECS:** IM4025000

**TSCA:** TSCA 8(b) inventory: Diisopropylamine

**CI#:** Not available.

**Synonym:** N-(1-Methylethyl)-2-propanamine; 2-Propanamine, N-(1-methylethyl)-

**Chemical Name:** Diisopropylamine

**Chemical Formula:** C<sub>6</sub>H<sub>15</sub>N

**Contact Information:**

**Sciencelab.com, Inc.**

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: [ScienceLab.com](http://ScienceLab.com)

**CHEMTREC (24HR Emergency Telephone), call:**

1-800-424-9300

**International CHEMTREC, call:** 1-703-527-3887

**For non-emergency assistance, call:** 1-281-441-4400

### Section 2: Composition and Information on Ingredients

**Composition:**

Name	CAS #	% by Weight
Diisopropylamine	108-18-9	100

**Toxicological Data on Ingredients:** Diisopropylamine: ORAL (LD50): Acute: 770 mg/kg [Rat]. 2120 mg/kg [Mouse]. 4700 mg/kg [Rabbit]. DERMAL (LD50): Acute: >10000 mg/kg [Rabbit]. VAPOR (LC50): Acute: 4200 mg/m 2 hours [Mouse].

### Section 3: Hazards Identification

**Potential Acute Health Effects:**

Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion. Hazardous in case of inhalation. Slightly hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive). Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

**Potential Chronic Health Effects:**

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to lungs, mucous membranes, upper respiratory tract, skin, eyes. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation.

Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection.

## Section 4: First Aid Measures

### Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

### Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

### Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

### Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

### Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. **WARNING:** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

### Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

**Serious Ingestion:** Not available.

## Section 5: Fire and Explosion Data

**Flammability of the Product:** Flammable.

**Auto-Ignition Temperature:** 316°C (600.8°F)

**Flash Points:** CLOSED CUP: -7°C (19.4°F). OPEN CUP: -1°C (30.2°F).

**Flammable Limits:** LOWER: 0.8% UPPER: 7.1%

**Products of Combustion:** These products are carbon oxides (CO, CO<sub>2</sub>).

**Fire Hazards in Presence of Various Substances:** Highly flammable in presence of open flames and sparks, of heat.

### Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. Slightly explosive in presence of heat.

### Fire Fighting Media and Instructions:

Flammable liquid, soluble or dispersed in water. **SMALL FIRE:** Use DRY chemical powder. **LARGE FIRE:** Use alcohol foam, water spray or fog.

### Special Remarks on Fire Hazards:

When heated to decomposition it emits toxic fumes of nitrogen oxides. Vapor may travel considerable distance to source of ignition and flash back. May form explosive mixtures with air.

**Special Remarks on Explosion Hazards:** Vapors may form explosive mixtures with air.

## Section 6: Accidental Release Measures

### Small Spill:

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

### Large Spill:

Flammable liquid. Corrosive liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

## Section 7: Handling and Storage

### Precautions:

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids.

### Storage:

Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

## Section 8: Exposure Controls/Personal Protection

### Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

### Personal Protection:

Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.

### Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

### Exposure Limits:

TWA: 5 (ppm) from OSHA (PEL) [United States] SKIN TWA: 5 (ppm) from ACGIH (TLV) [United States] SKIN TWA: 5 from NIOSH [United States] SKIN TWA: 20 (mg/m<sup>3</sup>) from NIOSH [United States] SKIN TWA: 5 (ppm) [United Kingdom (UK)] SKIN TWA: 5 (ppm) [Belgium] SKIN TWA: 5 (ppm) [Finland] SKIN TWA: 20 (mg/m<sup>3</sup>) from OSHA (PEL) [United States] SKIN TWA: 5 (ppm) [Norway] SKIN Consult local authorities for acceptable exposure limits.

## Section 9: Physical and Chemical Properties

**Physical state and appearance:** Liquid.

**Odor:** Ammoniacal. Fish-like.

**Taste:** Not available.

**Molecular Weight:** 101.19 g/mole

**Color:** Colorless.

**pH (1% soln/water):** Not available.

**Boiling Point:** 84°C (183.2°F)

**Melting Point:** -61°C (-77.8°F)

**Critical Temperature:** 249°C (480.2°F)

**Specific Gravity:** 0.7169 (Water = 1)

**Vapor Pressure:** 8 kPa (@ 20°C)

**Vapor Density:** 3.5 (Air = 1)

**Volatility:** Not available.

**Odor Threshold:** Not available.

**Water/Oil Dist. Coeff.:** The product is more soluble in oil;  $\log(\text{oil/water}) = 1.4$

**Ionicity (in Water):** Not available.

**Dispersion Properties:** See solubility in water, diethyl ether, acetone.

**Solubility:**

Easily soluble in diethyl ether, acetone. Partially soluble in cold water. Very soluble in benzene, ethanol.

### Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Heat, ignition sources, incompatible materials

**Incompatibility with various substances:** Reactive with oxidizing agents, acids.

**Corrosivity:** Non-corrosive in presence of glass.

**Special Remarks on Reactivity:**

It will react vigorously with oxidizing materials. It will also react with strong acids. Diisopropylamine may attack some forms of plastic.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Will not occur.

### Section 11: Toxicological Information

**Routes of Entry:** Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

**Toxicity to Animals:**

WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 770 mg/kg [Rat]. Acute dermal toxicity (LD50): >10000 mg/kg [Rabbit]. Acute toxicity of the vapor (LC50): 4200 mg/m<sup>3</sup> 2 hours [Mouse].

**Chronic Effects on Humans:**

MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. May cause damage to the following organs: lungs, mucous membranes, upper respiratory tract, skin, eyes.

**Other Toxic Effects on Humans:**

Very hazardous in case of skin contact (irritant), of ingestion. Hazardous in case of inhalation (lung corrosive). Slightly hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive).

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:** May affect genetic material (mutagenic)

**Special Remarks on other Toxic Effects on Humans:**

Acute Potential Health Effects: Skin: It causes severe skin irritation and burns. Causes smarting of skin and first-degree burns on short exposure; may cause second-degree burns on long exposure. It may be absorbed through the skin with possible systemic effects. Eyes: Contact with liquid causes severe eye irritation and burns with possible loss of vision. Contact with vapors causes irritation disturbances of vision or visual impairment Inhalation: It can cause respiratory tract (nose, throat, lungs) and mucous membrane irritation with coughing and/or shortness of breath, and possible burns to the respiratory tract. Higher exposures can cause pulmonary edema. Inhalation of vapors can cause headache, nausea, vomiting, dizziness or coma, or suffocation. May also cause vision problems and cause pulmonary edema. Ingestion: May be harmful if swallowed. Causes gastrointestinal tract irritation with sore throat, vomiting, diarrhea, burns to the mouth, throat and stomach. Chronic Potential Health Effects: Skin: Repeated or prolonged skin contact may cause dermatitis

## Section 12: Ecological Information

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The products of degradation are less toxic than the product itself.

**Special Remarks on the Products of Biodegradation:** Not available.

## Section 13: Disposal Considerations

**Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## Section 14: Transport Information

**DOT Classification:**

CLASS 3: Flammable liquid. Class 8: Corrosive material

**Identification:** : Diisopropylamine UNNA: 1158 PG: II

**Special Provisions for Transport:** Not available.

## Section 15: Other Regulatory Information

**Federal and State Regulations:**

Connecticut hazardous material survey.: Diisopropylamine Illinois toxic substances disclosure to employee act: Diisopropylamine Rhode Island RTK hazardous substances: Diisopropylamine Pennsylvania RTK: Diisopropylamine Florida: Diisopropylamine Minnesota: Diisopropylamine Massachusetts RTK: Diisopropylamine Massachusetts spill list: Diisopropylamine New Jersey: Diisopropylamine TSCA 8(b) inventory: Diisopropylamine

**Other Regulations:**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

**Other Classifications:**

**WHMIS (Canada):**

CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS E: Corrosive liquid.

**DSCL (EEC):**

**HMIS (U.S.A.):**

**Health Hazard:** 2

**Fire Hazard:** 3

**Reactivity:** 0

**Personal Protection:**

**National Fire Protection Association (U.S.A.):**

**Health:** 3

**Flammability:** 3

**Reactivity:** 0

**Specific hazard:**

**Protective Equipment:**

Gloves. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Face shield.

### Section 16: Other Information

**References:** Not available.

**Other Special Considerations:** Not available.

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