

# Material Safety Data Sheet

## Diisopropylamine

ACC# 07610

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Diisopropylamine

**Catalog Numbers:** 02412-4

**Synonyms:** DIPA; N-(1-Methylethyl)-2-propanamine; Diisopropylamine.

**Company Identification:**

Fisher Scientific

1 Reagent Lane

Fair Lawn, NJ 07410

**For information, call:** 201-796-7100

**Emergency Number:** 201-796-7100

**For CHEMTREC assistance, call:** 800-424-9300

**For International CHEMTREC assistance, call:** 703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
108-18-9	Diisopropylamine	100	203-558-5

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: colorless liquid. Flash Point: -7 deg C.

**Danger!** Extremely flammable liquid and vapor. Vapor may cause flash fire. Causes eye and skin burns. Causes digestive and respiratory tract burns. May be absorbed through intact skin. May be harmful if inhaled. May be harmful if swallowed.

**Target Organs:** Respiratory system, eyes, skin, mucous membranes.

#### Potential Health Effects

**Eye:** Causes eye burns. Rapidly penetrates eye tissue. Exposure to concentrations between 25 and 50 ppm may cause disturbances of vision described as "haziness".

**Skin:** Causes skin burns. May be absorbed through the skin.

**Ingestion:** Harmful if swallowed. Causes gastrointestinal tract burns.

**Inhalation:** Causes chemical burns to the respiratory tract. Inhalation may cause nausea and headache.

**Chronic:** Prolonged or repeated skin contact may cause dermatitis. Chronic inhalation may cause effects similar to those of acute inhalation.

## 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:** Rapidly penetrates eye tissue. Extensive flushing of the eye is recommended.

## 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. Use water spray to keep fire-exposed containers cool. 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:** Water may be ineffective. Use water spray, dry chemical, "alcohol resistant" foam, or carbon dioxide.

**Flash Point:** -7 deg C ( 19.40 deg F)

**Autoignition Temperature:** 316 deg C ( 600.80 deg F)

**Explosion Limits, Lower:**0.8%

**Upper:** 7.1%

**NFPA Rating:** (estimated) Health: 3; Flammability: 3; Instability: 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 container. Remove all sources of ignition. Provide ventilation. Use water spray to cool and disperse vapors, protect personnel, and dilute spills to form nonflammable mixtures.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. 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 ingest or inhale. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Keep away from heat, sparks and flame.

**Storage:** Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed. Isolate from oxidizing materials and acids.

## Section 8 - Exposure Controls, Personal Protection

**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

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Diisopropylamine	5 ppm TWA; Skin - potential significant contribution to overall exposure by the cutaneous route	5 ppm TWA; 20 mg/m <sup>3</sup> TWA 200 ppm IDLH	5 ppm TWA; 20 mg/m <sup>3</sup> TWA

**OSHA Vacated PELs:** Diisopropylamine: 5 ppm TWA; 20 mg/m<sup>3</sup> TWA

### Personal Protective Equipment

**Eyes:** Wear chemical splash goggles.

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

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** 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:** Liquid  
**Appearance:** colorless  
**Odor:** ammonia-like  
**pH:** alkaline  
**Vapor Pressure:** 60 mm Hg @ 20 deg C  
**Vapor Density:** 3.5  
**Evaporation Rate:** 5.8 (butyl acetate=1)  
**Viscosity:** 0.4 mPa s 20 C  
**Boiling Point:** 84 deg C  
**Freezing/Melting Point:** -61 deg C  
**Decomposition Temperature:** Not available.  
**Solubility:** Soluble.  
**Specific Gravity/Density:** 0.7200  
**Molecular Formula:** C<sub>6</sub>H<sub>15</sub>N  
**Molecular Weight:** 101.19

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.  
**Conditions to Avoid:** Ignition sources.  
**Incompatibilities with Other Materials:** Strong oxidizing agents, strong acids.  
**Hazardous Decomposition Products:** Nitrogen oxides, carbon monoxide, carbon dioxide.  
**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

**RTECS#:**  
**CAS#** 108-18-9: IM4025000  
**LD50/LC50:**  
CAS# 108-18-9:  
Inhalation, mouse: LC50 = 4200 mg/m<sup>3</sup>/2H;  
Inhalation, rat: LC50 = 4800 mg/m<sup>3</sup>/2H;  
Oral, mouse: LD50 = 2120 mg/kg;  
Oral, rabbit: LD50 = 4700 mg/kg;  
Oral, rat: LD50 = 770 mg/kg;  
Skin, rabbit: LD50 = >10 gm/kg;

**Carcinogenicity:**

CAS# 108-18-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** Edema of the epithelium of the cornea, generally without pain, has been produced by amine vapors, causing colored haloes to be seen around lights, usually in the evening, after industrial exposure to the vapors of various amines.

**Teratogenicity:** No data available.

**Reproductive Effects:** No data available.

**Mutagenicity:** No data available.

**Neurotoxicity:** No data available.

**Other Studies:**

## Section 12 - Ecological Information

No information available.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14 - Transport Information

	US DOT	Canada TDG
<b>Shipping Name:</b>	DIISOPROPYLAMINE	No information available.
<b>Hazard Class:</b>	3	
<b>UN Number:</b>	UN1158	
<b>Packing Group:</b>	II	

## Section 15 - Regulatory Information

## **US FEDERAL**

### **TSCA**

CAS# 108-18-9 is listed on the TSCA inventory.

### **Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

### **Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

### **Section 12b**

None of the chemicals are listed under TSCA Section 12b.

### **TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

### **CERCLA Hazardous Substances and corresponding RQs**

None of the chemicals in this material have an RQ.

### **SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

### **SARA Codes**

CAS # 108-18-9: immediate, fire, sudden release of pressure.

### **Section 313** No chemicals are reportable under Section 313.

### **Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

### **Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

### **OSHA:**

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

### **STATE**

CAS# 108-18-9 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

### **California Prop 65**

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:**

F C

#### **Risk Phrases:**

R 11 Highly flammable.

R 20/22 Harmful by inhalation and if swallowed.

R 34 Causes burns.

#### **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 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**WGK (Water Danger/Protection)**

CAS# 108-18-9: 2

**Canada - DSL/NDSL**

CAS# 108-18-9 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of B2, E.

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.

**Canadian Ingredient Disclosure List**

CAS# 108-18-9 is listed on the Canadian Ingredient Disclosure List.

**Section 16 - Additional Information**

**MSDS Creation Date:** 9/02/1997

**Revision #5 Date:** 3/15/2007

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