



THE POWER OF THREE<sup>3</sup>  
**PHARMCO-AAPER**  
AND COMMERCIAL ALCOHOLS

Product Information (203) 740-3471 / Emergency Assistance CHEMTREC 1-800-424-9300

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# MATERIAL SAFETY DATA SHEETS

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## Diisopropylamine

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### 1. CHEMICAL PRODUCT IDENTIFICATION

Product Name: Diisopropylamine  
Synonym(s): 2-Propanamine,N-(1-methylethyl)-; DIPA  
Molecular Formula:  $[(CH_3)_2CH]_2NH$   
Molecular Weight: 101.19

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS No	Percent	Hazardous
Diisopropylamine	108-18-9	100%	Yes

### 3. HAZARDS IDENTIFICATION

WARNING! CAUSES SEVERE BURNS TO EVERY AREA OF CONTACT. HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. FLAMMABLE LIQUID AND VAPOR.

NFPA Hazard Ratings: Health - 3, Flammability - 3, Reactivity - 0

NOTE: NFPA ratings involve data and interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

## Potential Health Effects

Inhalation: Respiratory irritant. Vapors irritate the nose, throat, and respiratory tract. Other symptoms may include headache, vision problems, and nausea. High concentrations can cause pulmonary edema.

Ingestion: Harmful if swallowed. Symptoms may parallel those from inhalation. Corrosive. Swallowing can cause severe burns of the mouth, throat, and stomach. Can cause sore throat, vomiting, diarrhea.

Skin Contact: Corrosive. Symptoms of redness, pain, and severe burn can occur. May be absorbed through the skin with possible systemic effects.

Eye Contact: Exposures to vapor and liquid causes irritation, pain, visual problems and burns.

Chronic Exposure: Chronic inhalation may cause lung problems. Prolonged or repeated skin exposure may cause dermatitis.

Aggravation of Pre-existing Conditions: Persons with pre-existing skin disorders or eye problems or impaired respiratory function may be more susceptible to the effects of the substance.

## 4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately.

Ingestion: DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Call a physician immediately.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician, immediately. Wash clothing before reuse.

Eye Contact: Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Call a physician immediately.

Note to Physician: For severe exposure, hospitalization with careful monitoring of the exposed person for delayed onset of severe pulmonary edema is recommended. Contact with eyes demands specific medical treatment; extensive irrigation is required because of the inability of the eye to buffer basic pH changes and because of this material's rapid penetration of eye tissue.

## 5. FIRE FIGHTING MEASURES

Fire:

Flash point: 2C (36F) CC

Autoignition temperature: 316C (601F)

Flammable limits in air % by volume: lel: 0.8; uel: 7.1

Explosion: Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Vapors can flow along surfaces to distant ignition source and flash back. Sensitive to static discharge.

Fire Extinguishing Media: Dry chemical, alcohol foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. This highly flammable liquid must be kept from sparks, open flame, hot surfaces, and all sources of heat and ignition.

## 6. ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer!

## 7. HANDLING AND STORAGE

Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Airborne Exposure Limits:

-OSHA Permissible Exposure Limit (PEL): 5 ppm (TWA) skin

-ACGIH Threshold Limit Value (TLV): 5 ppm (TWA) skin

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved): If the exposure limit is exceeded, a full facepiece respirator with organic vapor cartridge may be worn up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection: Maintain eye wash fountain and quick-drench facilities in work area. Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid.

Odor: Amine-like odor.

Solubility: Soluble in water.

Specific Gravity: 0.722 @ 20C/4C

pH: No information found.

% Volatiles by volume @ 21C (70F): 100  
Boiling Point: 84C (183F)  
Melting Point: -61C (-78F)  
Vapor Density (Air=1): 3.5  
Vapor Pressure (mm Hg): 70 @ 20C (68F)  
Evaporation Rate (BuAc=1): No information found.

## 10. STABILITY AND REACTIVITY

Stability: Stable under ordinary conditions of use and storage. Strongly alkaline.

Hazardous Decomposition Products: Burning may produce carbon monoxide, carbon dioxide, nitrogen oxides.  
Hazardous Polymerization: Will not occur.

Incompatibilities: Acids, oxidizing agents, heat or flame.

Conditions to Avoid: Heat, flames, ignition sources and incompatibles.

## 11. TOXICOLOGICAL INFORMATION

Oral rat LD50: 770 mg/kg. Inhalation rat LC50: 4800 mg/m<sup>3</sup>/2H Investigated as a mutagen. Skin rabbit LD50 >10gm/kg.

-----\Cancer Lists\-----

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Diisopropylamine (108-18-9)	No	No	None

## 12. ECOLOGICAL INFORMATION

Environmental Fate: When released into the soil, this material may evaporate to a moderate extent. When released into the soil, this material may biodegrade to a moderate extent. When released into the soil, this material may leach into groundwater. When released into water, this material may biodegrade to a moderate extent. When released into water, this material may evaporate to a moderate extent. When released into the water, this material is expected to have a half-life between 1 and 10 days. This material has an estimated bioconcentration factor (BCF) of less than 100. This material is not expected to significantly bioaccumulate. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to have a half-life of less than 1 day.

Environmental Toxicity: No information found.

## 13. DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. TRANSPORT INFORMATION

Domestic (Land, D.O.T.)  
Proper Shipping Name: Diisopropylamine  
Hazard Class: 3  
UN/NA: UN1158  
Packing Group: II

International (Water, I.M.O.)  
Proper Shipping Name: Diisopropylamine  
Hazard Class: 3.2, 8  
UN/NA: UN1158  
Packing Group: II

### 15. REGULATORY INFORMATION

-----\Chemical Inventory Status - Part 1\-----  
Ingredient                    TSCA    EC        Japan    Australia  
Diisopropylamine (108-18-9)    Yes    Yes        Yes        Yes

-----\Chemical Inventory Status - Part 2\-----  
                                  --Canada--  
Ingredient                    Korea    DSL        NDSL    Phil.  
Diisopropylamine (108-18-9)    Yes    Yes        No        Yes

-----\Federal, State & International Regulations - Part 1\-----  
                                  -SARA 302-        -----SARA 313-----  
Ingredient                    RQ        TPQ        List        Chemical Catg.  
Diisopropylamine (108-18-9)    No        No        No        No

-----\Federal, State & International Regulations - Part 2\-----  
                                  -RCRA-                -TSCA-  
Ingredient                    CERCLA                261.33    8(d)  
Diisopropylamine (108-18-9)    No                        No        No

Chemical Weapons Convention: Yes    TSCA 12(b): No    CDTA: No  
SARA 311/312: Acute: Yes    Chronic: Yes    Fire: Yes    Pressure: No  
Reactivity: No (Pure/Liquid)

Australian Hazchem Code: 3WE  
Poison Schedule: No information found.

### 16. OTHER INFORMATION

The information contained herein is based on current knowledge and experience; no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and the protection of the environment.