

## Material Safety Data Sheet

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Version 1.3

According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

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1 - Product and Company Information

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Product Name N,N'-DIISOPROPYLCARBODIIMIDE, 99%  
Product Number D125407

Company Sigma-Aldrich Pty. Ltd.  
12 Anella Avenue  
Castle Hill NSW 2154

Technical Phone # +61 2 9841 0555 (1800 800 097)

Fax +61 2 9841 0500 (1800 800 096)

Emergency Phone # +44 8701906777 (1800 448 465)

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2 - Composition/Information on Ingredients

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Product Name	CAS #	EC no	Annex I Index Number
1,3-DIISOPROPYLCARBODIIMIDE	693-13-0	211-743-7	None

Formula C7H14N2

Molecular Weight 126.2 AMU

Synonyms Diisopropylcarbodiimide \*  
N,N'-Methanetetraylbis-2-propanamine \*  
2-Propanamine, N,N'-methanetetraylbis- (9CI) \*  
n,n'-diisopropylcarbodiimide

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3 - Hazards Identification

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## SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

Flammable. Very toxic by inhalation. Irritating to eyes, respiratory system and skin. Risk of serious damage to eyes. May cause sensitization by inhalation and skin contact.

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4 - First Aid Measures

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## AFTER INHALATION

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

## AFTER SKIN CONTACT

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

## AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

## AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

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## 5 - Fire Fighting Measures

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### EXTINGUISHING MEDIA

Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.

### SPECIAL RISKS

Specific Hazard(s): Flammable liquid. Emits toxic fumes under fire conditions. Vapor may travel considerable distance to source of ignition and flash back.

Explosion Hazards: Vapor may travel considerable distance to source of ignition and flash back.

### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

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## 6 - Accidental Release Measures

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### PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area. Shut off all sources of ignition.

### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

### METHODS FOR CLEANING UP

Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

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## 7 - Handling and Storage

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### HANDLING

Directions for Safe Handling: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure. Note: cloudiness or precipitation is unavoidable and should not affect use.

### STORAGE

Conditions of Storage: Keep tightly closed. Keep away from heat, sparks, and open flame. Store under argon.

SPECIAL REQUIREMENTS: Store under inert gas. Moisture sensitive.

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## 8 - Exposure Controls / Personal Protection

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### ENGINEERING CONTROLS

Safety shower and eye bath. Use only in a chemical fume hood.

### GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

### PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Self-contained breathing apparatus should be worn

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

## 9 - Physical and Chemical Properties

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Appearance	Physical State: Clear liquid Color: Very faintly brown-yellow Odor: Stench.	
Property	Value	At Temperature or Pressure
pH	N/A	
BP/BP Range	145 - 148 °C	
MP/MP Range	N/A	
Flash Point	31 °C	Method: closed cup
Flammability	N/A	
Autoignition Temp	N/A	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	N/A	
Vapor Pressure	N/A	
SG/Density	0.815 g/cm3	
Partition Coefficient	N/A	
Viscosity	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

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## 10 - Stability and Reactivity

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### STABILITY

Stable: Stable.

Conditions of Instability: Moisture sensitive.

Materials to Avoid: Strong oxidizing agents, Acids.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides.

### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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## 11 - Toxicological Information

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RTECS NUMBER: FF2175000

### ACUTE TOXICITY

LC50

Inhalation

Rat

0.105 MG/L

4 H

LD50

Intravenous

Mouse  
36 MG/KG

#### SENSITIZATION

Sensitization: May cause allergic respiratory and skin reactions

#### SIGNS AND SYMPTOMS OF EXPOSURE

Exposure can cause: Damage to the eyes. Nausea, headache, and vomiting. Causes severe corneal edema. Temporary blindness has been reported. Symptoms may be delayed. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: Causes severe eye irritation.

Inhalation: May be fatal if inhaled. Vapor or mist is irritating to the mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

#### TARGET ORGAN INFORMATION

Nerves.

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#### 12 - Ecological Information

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No data available.

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#### 13 - Disposal Considerations

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#### SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

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#### 14 - Transport Information

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#### RID/ADR

UN#: 2929

Class: 6.1

PG: I

Proper Shipping Name: Toxic liquid, flammable, organic, n.o.s.

#### IMDG

UN#: 2929

Class: 6.1

PG: I

Subrisk: 3

Proper Shipping Name: TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.

Marine Pollutant: No

Severe Marine Pollutant: No

Technical Name: Required

#### IATA

UN#: 2929

Class: 6.1

PG: I

Subrisk: 3

Proper Shipping Name: Toxic liquid, flammable,  
organic, n.o.s.  
Inhalation Packing Group I: No  
Technical Name: Required

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## 15 - Regulatory Information

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### CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: T+

Very toxic.

R-PHRASES: 10 26 36/37/38 41 42/43

Flammable. Very toxic by inhalation. Irritating to eyes,  
respiratory system and skin. Risk of serious damage to eyes.  
May cause sensitization by inhalation and skin contact.

S-PHRASES: 26 36/37/39 45

In case of contact with eyes, rinse immediately with plenty of  
water and seek medical advice. Wear suitable protective  
clothing, gloves, and eye/face protection. In case of accident  
or if you feel unwell, seek medical advice immediately (show  
the label where possible).

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## 16 - Other Information

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### WARRANTY

The above information is believed to be correct but does not  
purport to be all inclusive and shall be used only as a guide. The  
information in this document is based on the present state of our  
knowledge and is applicable to the product with regard to  
appropriate safety precautions. It does not represent any  
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