

MATERIAL SAFETY DATA SHEET (MSDS)



PRODUCT NAME.: DIISOPROPYLAMINE

CAS No.: 108-18-9

1.1. Product identifier

Product form	: Substance
Product name	: DIISOPROPYLAMINE
Product Grades (Applicable)	: D0074H (Pack size(s) :-1LT,2.5LT D0074A (Pack size(s) :- 0.5L,2.5L,25L,200LT
Product Code	: D0074
CAS No	: 108-18-9
Formula	: C ₆ H ₁₅ N

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses	: Industrial. For professional use only
1.2.2. Uses advised against	: No additional information available

1.3. Details of the supplier of the safety data sheet

RYZE CHEMIE
W-68,Mankivli MIDC
Badlapur (E), Thane,
Maharashtra-421503
www.ryzechemie.com

1.4. Emergency Telephone Number

+91- 99-3006-04-04 :

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2

H225




Acute toxicity (oral), Category 4	H302
Acute toxicity (inhal.), Category 4	H332
Skin corrosion/irritation, Category 1B	H314
Full text of H- and EUH-statements: see section 16	

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label Elements

Labelling according to Regulation (EC) No. 1907/2006 [CLP]

Hazard pictograms (CLP)	:	  
		GHS02 GHS05
		GHS06
Signal word (CLP)	:	Danger
Hazard statements (CLP)	:	H225 - Highly flammable liquid and vapour H302+H332 - Harmful if swallowed or if inhaled H314 - Causes severe skin burns and eye damage
Precautionary statements (CLP)	:	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P280 - Wear protective clothing, eye protection, face protection, protective gloves. P310 - Immediately call a POISON CENTER/doctor CENTER/doctor/... P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name	DIISOPROPYLAMINE
CAS No	108-18-9
EC-No.	203-558-5
EC Index-No.	612-129-00-5

Full text of R- and H-phrases: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after skin contact	: Take off immediately all contaminated clothing. Immediately call a POISON CENTER/doctor. Wash with plenty of water/....
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: Causes severe skin burns and eye damage.
Symptoms/effects after inhalation	: Harmful if inhaled.
Symptoms/effects after ingestion	Harmful if inhaled.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Carbon dioxide. Dry powder. Foam. Water spray
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Highly flammable liquid and vapour.
Explosion hazard	: May form flammable/explosive vapour-air mixture.
Hazardous decomposition products in case of fire	: Not Classified Not Classified

5.3. Advice for firefighters

Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.
6.1.1. For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Use personal protective equipment as required.
Emergency procedures	: Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Collect spillage. On land, sweep or shovel into suitable containers.
Other information	: Not Classified

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	:	Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling	:	Avoid contact with skin and eyes. Use only non-sparking tools. Keep away from sources of ignition - No smoking. Do not breathe vapours. Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures	:	Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/... equipment. Comply with applicable regulations.
Storage conditions	:	Keep in fireproof place. Keep container tightly closed
Packaging materials	:	Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Hand protection	: Protective gloves
Eye protection	: Chemical goggles or face shield
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Wear respiratory protection

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Molecular mass	: 101.1 g/mol
Colour	: Clear Colorless
Odour	: amine-like odor
Odour threshold	: No data available
pH	: No data available
pH solution concentration	: No data available
Relative evaporation rate	: No data available
Melting point	: -61 °C
Freezing point	: No data available
Boiling point	: 84 °C
Flash point	: -7 °C
Auto-ignition temperature	: 316 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable Highly flammable liquid and vapour
Vapour pressure	: 67 hPa at 20 °C
Relative vapour density at 20 °C	: 3.49
Relative density	: Not available
Density	: 0.722 g/cm
Relative gas density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 0.011 - 0.085 vol %

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosion limits	: No additional information available
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9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical Stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Open flame. Heat. Sparks. Direct sunlight

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Harmful if swallowed. Harmful if inhaled
Skin corrosion/irritation	:	Causes severe skin burns and eye damage.
Serious eye damage/irritation	:	Serious eye damage, category 1, implicit
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified
Potential adverse human health	:	Harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	:	No additional information available
Sewage disposal recommendations	:	No additional information available
Product/Packaging disposal recommendations	:	Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Additional information	:	Handle empty containers with care because residual vapours are flammable.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR)	:	1158
UN-No. (IMDG)	:	1158
UN-No.(IATA)	:	1158
UN-No.(ADN)	:	1158
UN-No. (RID)	:	1158

14.2. UN proper shipping name

Proper Shipping Name (ADR)	:	DIISOPROPYLAMINE
Proper Shipping Name (IMDG)	:	DIISOPROPYLAMINE

Proper Shipping Name (IATA)	: Diisopropylamine
Proper Shipping Name (ADN)	: DIISOPROPYLAMINE
Proper Shipping Name (RID)	: DIISOPROPYLAMINE
Transport document description (ADR)	: UN 1158 DIISOPROPYLAMINE, 3 (8), II, (D/E)
Transport document description (IMDG)	: UN 1158 DIISOPROPYLAMINE, 3 (8), II (-7°C c.c.)
Transport document description (IATA)	: UN 1158 Diisopropylamine, 3 (8), II
Transport document description (ADN)	: UN 1158 DIISOPROPYLAMINE, 3 (8), II
Transport document description (RID)	: UN 1158 DIISOPROPYLAMINE, 3 (8), II

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	: 3 (8)		
Danger labels (ADR)	: 3,8		

IMDG

Transport hazard class(es) (IMDG)	: 3 (8)		
Danger labels (IMDG)	: 3,8		

IATA

Transport hazard class(es) (IATA)	: 3 (8)		
Hazard labels (IATA)	: 3, 8		

ADN

Transport hazard class(es) (ADN)	: 3 (8)		
Hazard labels (ADN)	: 3, 8		

RID

Transport hazard class(es) (RID)	: 3 (8)		
Hazard labels (RID)	: 3, 8		

14.4. Packing group

Packing group (ADR)	: II
Packing group (IMDG)	: II
Packing group (IATA)	: II
Packing group (ADN)	: II
Packing group (RID)	: II

14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

14.6. Special precautions for user

Overland transport	:
Classification code (ADR)	: FC
Limited quantities (ADR)	: 1L
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P001, IBC02
Special packing provisions (ADR)	: Not Classified
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T7
Portable tank and bulk container special provisions (ADR)	: TP1
Tank code (ADR)	: L4BH
Vehicle for tank carriage	: FL
Transport category (ADR)	: 2
Special provisions for carriage - Bulk (ADR)	: Not Classified
Special provisions for carriage - Loading, unloading and handling (ADR)	: Not Classified
Special provisions for carriage - Operation (ADR)	: S2, S20
Hazard identification number (Kemler No.)	: 338
Orange plates	:



Tunnel restriction code (ADR)	: D/E
EAC code	: •3WE
- Transport by sea	
Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-C
Stowage category (IMDG)	: B

Properties and observations (IMDG)	: Colourless, volatile liquid with a fishy odour. Flashpoint: -7°C c.c. Explosive limits:1.1% to 7.1% Partially miscible with water. Harmful by inhalation. Causes burns to skin, eyes and mucous membranes.
MFAG-No	: 132
- Air transport	
PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y340
PCA limited quantity max net quantity (IATA)	: 0.5L
PCA packing instructions (IATA)	: 352
PCA max net quantity (IATA)	: 1L
CAO packing instructions (IATA)	: 363
CAO max net quantity (IATA)	: 5L
ERG code (IATA)	: 3CH
- Inland waterway transport	
Classification code (ADN)	: FC
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E2
Equipment required (ADN)	: VE01
Special provisions (ADN)	: Not Classified
Number of blue cones/lights (ADN)	: 1
- Rail transport	
Classification code (RID)	: FC
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02
Mixed packing provisions (RID)	: MP19
Special provisions (RID)	: Not Classified
Portable tank and bulk container instructions (RID)	: T7
Portable tank and bulk container special provisions (RID)	: TP1
Tank codes for RID tanks (RID)	: L4BH
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE7
Hazard identification number (RID)	: 338

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

No REACH Annex XVII restrictions

DIISOPROPYLAMINE is not on the REACH Candidate List

DIISOPROPYLAMINE is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

12th Ordinance Implementing the

Federal Immission Control Act - 12.BImSchV

Hazardous Incident Ordinance

(12. BImSchV)

: Is not subject of the 12. BImSchV
(Hazardous Incident
Ordinance)

: No additional information available

Netherlands

SZW-lijst van kankerverwekkende stoffen

SZW-lijst van mutagene stoffen

SZW-lijst van reprotoxische stoffen – Borstvoeding

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling

: DIISOPROPYLAMINE is listed

: The substance is not listed

: The substance is not listed

: The substance is not listed

: The substance is not listed

Denmark

Classification remarks

: Emergency management guidelines
for the storage of

Danish National Regulations

flammable liquids must be followed
Young people below the age of 18
: years are not allowed to
use the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Flam. Liq. 2	Flammable liquids, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.
R11	Highly flammable
R20/22	Harmful by inhalation and if swallowed
R34	Causes burns
C	Corrosive
F	Highly flammable
Xn	Harmful

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.