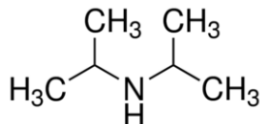


MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	: Substance
	:
EC Index-No.	: 612-129-00-5
EC-No.	: 203-558-5
CAS-No.	: 108-18-9
Product code	: 03353
Formula	: C ₆ H ₁₅ N
Chemical structure	:



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

1.2.1. Relevant identified uses

Industrial/Professional use spec	: 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

SPAN LAB
UNIT NO. 14, SKY INDUSTRIAL ESTATE, WALIV, VASAI (E)
401208 Mumbai - INDIA
PH: +91 9820509929
info@spanlab.in www.spanlab.in

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 statements : see section 16

DIISOPROPYLAMINE FOR SYNTHESIS

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Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

F; R11

Xn; R20/22

C; R34

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02

GHS05

GHS07

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 gloves, protective clothing, eye protection, face protection.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER/doctor

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : DIISOPROPYLAMINE FOR SYNTHESIS

CAS-No. : 108-18-9

EC-No. : 203-558-5

EC Index-No. : 612-129-00-5

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

3.2. Mixtures

Not applicable

DIISOPROPYLAMINE FOR SYNTHESIS

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SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
- 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/doctor.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.

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 swallowed.

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.

5.3. Advice for firefighters

- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

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 open flames. 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.

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.

DIISOPROPYLAMINE FOR SYNTHESIS

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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. Take precautionary measures against static discharge. 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

Storage conditions	: Keep in fireproof place. Keep container tightly closed.
Incompatible materials	: Heat sources.
Packaging materials	: Do not store in corrodable metal.

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
Relative evaporation rate (butylacetate=1)	: 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

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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	: No data available
Density	: 0.722 g/cm ³
Solubility	: Water: Soluble in 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

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 : 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

DIISOPROPYLAMINE FOR SYNTHESIS

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Reproductive toxicity : Not classified
STOT-single exposure : Not classified
Additional information : Corrosive to the respiratory tract.

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms : 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

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

DIISOPROPYLAMINE FOR SYNTHESIS

Safety Data Sheet

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)
Danger labels (ADN) : 3, 8



RID

Transport hazard class(es) (RID) : 3 (8)

DIISOPROPYLAMINE FOR SYNTHESIS

Safety Data Sheet

Danger 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) : 1I

Excepted quantities (ADR) : E2

Packing instructions (ADR) : P001, IBC02

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 - Operation (ADR) : S2, S20

Hazard identification number (Kemler No.) : 338

Orange plates :



Tunnel restriction code (ADR) : D/E

EAC code : •3WE

APP code : A(fl)

- 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

DIISOPROPYLAMINE FOR SYNTHESIS

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Flash point (IMDG)	: -7°C c.c.
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)	: PP, EP, EX, A
Ventilation (ADN)	: VE01
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
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

No REACH Annex XVII restrictions

DIISOPROPYLAMINE FOR SYNTHESIS is not on the REACH Candidate List

DIISOPROPYLAMINE FOR SYNTHESIS is not on the REACH Annex XIV List

DIISOPROPYLAMINE FOR SYNTHESIS

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15.1.2. National regulations

Germany

Reference to AwSV : Water hazard class (WGK) 2, Significantly hazardous to water (Classification according to AwSV; ID No. 614)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : DIISOPROPYLAMINE FOR SYNTHESIS is listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

Recommendations Danish Regulation : 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-statements:

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

DIISOPROPYLAMINE FOR SYNTHESIS

Safety Data Sheet

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.