

# **MATERIAL SAFETY DATA SHEET (MSDS)**

# **SECTION 1: Identification**

1.1 Product identifiers

Product Name: Diisopropylamine

Cat No.: AC149460000; AC149460010; AC149460025; AC149460050

**CAS No.:** 108-18-9

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

**Recommended uses:** Laboratory chemicals

**Uses advised against:** Food, drug, pesticide or biocidal product use.

1.3 Details of the supplier of the safety data sheet

**Company:** Krishna Solvechem Limited.

B/503, Sahayog, S. V. Road,

Kandivali (West), Mumbai – 400067. India.

**Telephone:** +91-22-6123 0222

**Email:** exports@kscl.co.in

1.4 Emergency telephone number

**Emergency Phone :** +91-8657457330

# **SECTION 2: Hazards identification**

#### 2.1 Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids	(Category 2)
Acute oral toxicity	(Category 4)
Skin Corrosion/Irritation	(Category 1 B)
Serious Eye Damage/Eye Irritation	(Category 1)
Specific target organ toxicity (single exposure)	(Category 3)
Target Organs - Respiratory system.	

#### 2.2 Label elements

Pictogram:





Signal word Danger

Hazard statement (s) Highly flammable liquid and vapor



Toxic if inhaled
Causes severe skin burns
and eye damage
May cause respiratory irritation

Precautionary statement (s)

Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. - No
smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment Use only non-sparking tools

Take precautionary measures against static discharge Keep cool

#### Inhalation:

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell

#### IF ON SKIN (or hair):

If skin irritation occurs: Get medical advice/attention IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

#### Eves:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention **Ingestion:** 

#### . - . . . .

Rinse mouth. Do NOT induce vomiting

#### **Fire**

In case of fire: Use CO2, dry chemical, or foam for extinction **Storage:** 

Store locked up Store in a well-ventilated place.

Keep container tightly closed



Disposal:

Dispose of contents/container to an approved waste disposal

plant

Hazards not otherwise classified (HNOC)

None identified

# **SECTION 3: Composition / information on ingredients**

# 3.1

Component	CAS-No	Weight %
Diisopropylamine	108-18-9	<=100

	SECTION 4: First aid measures					
4.1	Description of first aid measu	res				
	General Advice:	If symptoms persist, call a physician.				
	If inhalation :	If not breathing, give artificial respiration. Do not use mouth-to mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped wit a one-way valve or other proper respiratory medical device.  Remove to freshair. Immediate medical attention is required.				
	In case of skin contact:	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.				
	In case of eye contact :	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.				
	Ingestion:	Do NOT induce vomiting. Call a physician or poison control center immediately.				
4.2	Most important symptoms and effects :	Causes burns by all exposure routes. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation				
4.3	Notes to Physician:	Treat symptomatically				
	SEC	CTION 5: Firefighting effects				
5.1	Extinguishing media					
	Suitable extinguishing media :	carbon dioxide (CO2), dry sand, dry chemical, alcohol- resistant foam. Water mist may be used to cool closed containers.				
	Unsuitable Extinguishing Media: :	No information available				
5.2	Flash Point : Method :	-13.5 °C / 7.7 °F No information available				



**Autoignition Temperature:** 285 °C / 545 °F

**Explosion Limits:** 

**Upper** 7.1 % **Lower** 0.8 %

**Sensitivity to Mechanical** 

**Impact** 

No information available

**Sensitivity to Static** 

Discharge

No information available

**Specific Hazards Arising from** 

the Chemical:

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous

membranes.

**Hazardous Combustion** 

**Products:** 

Carbon monoxide (CO). Carbon dioxide (CO2). Nitrogen oxides

5.4 Protective Equipment and

**Precautions for Firefighters:** 

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and

full protective gear.

NFPA:

Health	Flammability	Instability	Physical hazards
3	3	0	N/A

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

#### 6.2 Environmental precautions

Should not be released into the environment.

#### 6.3 Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material.

# **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.



#### 7.2 Conditions for safe storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Flammables area. Keep away from heat, sparks and flame. Corrosives area. Incompatible Materials. Strong oxidizing agents.

# SECTION 8: Exposure controls/personal protection

# 8.1 Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH	Mexico OEL (TWA)
Diisopropylamine	TWA: 5 ppm Skin	(Vacated) TWA: 5 ppm (Vacated) TWA: 20 mg/m <sup>3</sup> Skin TWA: 5 ppm TWA: 20 mg/m <sup>3</sup>	IDLH: 200 ppm TWA: 5 ppm TWA: 20 mg/m <sup>3</sup>	TWA: 5 ppm

#### **Engineering Measures**

Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas. Use only under chemical fume hood.

#### 8.2 Exposure controls

#### Personal protective equipment -

#### Eye / Face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

#### Skin protection and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

#### **Respiratory protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European StandardEN 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.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice..

# **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties a) Appearance Colorless Liquid b) Odour ammonia like c) Odour Threshold No information available d) pH 12.3 100 g/l water e) Melting point / freezing point f) Initial boiling point and 84 °C / 183.2 °F



boiling range	
g) Flash point	-13.5 °C / 7.7 °F
h) Evaporation rate	5.8 (Butyl acetate = 1.0)
i) Flammability (solid, gas)	Not applicable
j) Upper/lower	Upper : 7.1 %
flammability or	Lower : 0.8 %
explosive limits	
k) Vapour pressure	95 mbar @ 20 °C
l) Vapour density	3.5
m) Specific Gravity	0.716
n) Solubility	Soluble in water
<ul><li>o) Partition coefficient: n octanol/water</li></ul>	No data available
p) Auto-ignition temperature	285 °C / 545 °F
q) Decomposition temperature	No information available
r) Viscosity	0.4 mPa.s @ 20 °C
s) Molecular formula	C6 H15 N
t) Molecular Weight	101.19

SECTION 10: Stability and Reactivity				
Reactive Hazard :	None known, based on information available			
Chemical stability :	Stable under normal conditions.			
Possibility of hazardous reactions :	None under normal processing.			
Conditions to avoid :	Keep away from open flames, hot surfaces and sources of ignition. Incompatible products.			
Incompatible materials:	Strong oxidizing agents			
Hazardous decomposition products :	Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides			
Hazardous Polymerization	Hazardous polymerization does not occur			
	Reactive Hazard: Chemical stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products:			



# **SECTION 11: Toxicological information**

#### 11.1

Information on toxicological effects

**Acute toxicity:** 

**Product Information:** 

**Component Information** 

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Diisopropylamine	LD50 = 770 mg/kg (	LD50 = 2000 mg/kg (	LC50 = 5.35  mg/L (
	Rat )	Rabbit )	Rat ) 4 h

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation: Causes burns by all exposure routes

Sensitization: No information available

**Carcinogenicity:** The table below indicates whether each agency ha

Any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Diisopropyl	108-18-	Not listed	Not	Not listed	Not listed	Not listed
amine	9		listed			

Mutagenic Effects:	No information available.
Reproductive Effects:	No information available.
Developmental Effects:	No information available.
Teratogenicity:	No information available.
STOT - single exposure :	Respiratory system
STOT - repeated exposure:	None known
Aspiration hazard :	No information available.
Symptoms / effects,both acute and delayed:	Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue anddanger of perforation
Endocrine Disruptor Information : Other Adverse Effects :	No information available The toxicological properties have not been fully investigated.



# **SECTION 12: Ecological information**

#### 12.1

#### **Ecotoxicity:**

Contains a substance which is:. Harmful to aquatic organisms. The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Diisopropylamine	EC50 = 20 mg/L/96h	Brachydanio rerio:	Not listed	EC50 = 53
		150 - 223 mg/L LC50		mg/L/24h
		96 h Oncorhynchus		Daphnia magna:
		mykiss: 37 mg/L		EC50 = 25.8
		LC50 96 h Poecilia		mg/L/24h
		reticulata: 1000		
		mg/L LC50 96 h		
		Oryzias latipes: 420 -		
		560 mg/L LC50 96 h		

**12.2** Persistence and degradability: Persistence is unlikely based on information Available.

Bioaccumulation/
Accumulation

No information available

12.3 Mobility:

Will likely be mobile in the environment due toits volatility.

**Log pow:** 1.4

# **SECTION 13: Disposal considerations**

**13.1 Waste treatment methods:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

# **SECTION 14: Transport information**

14.1 UN number :

DOT: UN1158 TDG: UN1158 IATA: UN1158 IMDG: UN1158

14.2 UN proper shipping name

DOT: DIISOPROPYLAMINE TDG: DIISOPROPYLAMINE

IMDG: DIISOPROPYLAMINE IATA: DIISOPROPYLAMINE

14.3 Transport hazard class(es) DOT: 3 TDG: 3 IMDG: 3 IATA: 3

**14.4 Packaging group:** DOT: II TDG: II IMDG: II IATA: II

# **SECTION 15: Regulatory information**

#### 15.1 United states of America Inventory:

Component	CAS-No	TSCA	TSCA Inventory notification Active/Inactive	TSCA - EPA Regulatory Flags
Diisopropylamine	108-18- 9	X	ACTIVE	-

Legend:



**TSCA** - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

#### **International Inventories:**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Diisopropyl amine	108-18- 9	Х	-	203-558-5	Х	Х	Х	Х	Х	KE- 24105

# **U.S. Federal Regulations**

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

**OSHA** - Occupational Safety and Not applicable

**Health Administration** 

**CERCLA** Not applicable

California Proposition 65 This product does not contain any Proposition 65

chemicals.

# 15.2 U.S. State Right-to-Know Regulations:

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Diisopropylamine	X	X	X	-	Х

# **U.S. Department of Transportation**

Reportable Quantity (RQ): N



DOT Marine Pollutant N
DOT Severe Marine Pollutant N

**U.S. Department of Homeland** - This product does not contain the any DHS Chemicals. **Security** 

#### **Other International Regulations**

Mexico – Grade No information available

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

Safety,	health and envi	ronmental regulatio	ons/legislation sp	pecific for the sub	ostance or mixture
Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Diisopropyl amine	108-18-9	Listed	Not applicable	Not applicable	Not applicable
Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantitiesfor Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantitiesfor Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Diisopropyl amine	108-18-9	Not applicable	Not applicable	Not applicable	Not applicable

#### **SECTION 16: Other information**

**16.1 Prepared By:** Regulatory affairs

Krishna Solvechem

Limited

**Email:** exports@kscl.co.in

Creation Date:23-Mar-2012Revision Date:19-Jun-2023Print Date:19-Jun-2023

**Revision Summary:** This document has been updated to comply with the US OSHA

HazCom 2012 Standard replacing the current legislation under29 C F R 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of

Chemicals (GHS).

#### 16.2 Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

