

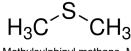
## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Reference number: 0125B Issue date: 3/14/2024 Revision date: 3/14/2024 Supersedes version of: 4/9/2015 Version: 1.0

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

## 1.1. Product identifier

Product form Trade name EC-No. CAS-No. Product code Type of product Formula Chemical structure : Substance : DIMETHYL SULPHOXIDE FOR HPLC : 200-664-3 : 67-68-5 : 0125B : Organic compound : C2H6OS : II



#### Synonyms

: Methylsulphinyl methane, Methyl sulphoxide, Dimethyl (oxido)sulphur, DMSO

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

## 1.2.1. Relevant identified uses

Use of the substance/mixture Use of the substance/mixture

: Laboratory chemicals, Manufacture of substances : Solvents

#### 1.2.2. Uses advised against

No additional information available

## **1.3. Details of the supplier of the safety data sheet**

LOBA CHEMIE PVT.LTD. 107 Wode House Road, Jehangir Villa, Colaba 400005 Mumbai INDIA T +91 22 6663 6663, F +91 22 6663 6699 info@lobachemie.com, www.lobachemie.com

#### **1.4. Emergency telephone number**

Emergency number

: + 91 22 6663 6663 (9:00am - 6:00 pm)

## **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

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

Not classified

## Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

## 2.2. Label elements

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

No labelling applicable

## 2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

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SECTION 3: Composition/information on ingredients		
3.1. Substances		
Substance type	: Mono-constituent	
Name	Product identifier	%
DIMETHYL SULPHOXIDE	CAS-No.: 67-68-5 EC-No.: 200-664-3	100

## 3.2. Mixtures

Not applicable

SECTION 4: First aid measures	
4.1. Description of first aid measures	i de la constante de la constant
First-aid measures general	: If you feel unwell, seek medical advice.
First-aid measures after inhalation	<ul> <li>Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.</li> </ul>
First-aid measures after skin contact	<ul> <li>Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash skin with plenty of water.</li> </ul>
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. If you feel unwell, seek medical advice. Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and e	ffects, both acute and delayed
Symptoms/effects after inhalation	: Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact Symptoms/effects after ingestion	<ul><li>None under normal conditions.</li><li>None under normal conditions.</li></ul>

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 Unsuitable extinguishing media	<ul> <li>dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). Water spray. Dry powder. Foam. Carbon dioxide.</li> <li>Do not use a heavy water stream.</li> </ul>	
5.2. Special hazards arising from the substance or mixture		
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	<ul> <li>No fire hazard.</li> <li>No direct explosion hazard.</li> <li>Toxic fumes may be released.</li> </ul>	
5.3. Advice for firefighters		
Firefighting instructions Protection during firefighting	<ul> <li>Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.</li> <li>Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.</li> </ul>	

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SECTION 6: Accidental release measures		
6.1. Personal precautions, protective	equipment and emergency procedures	
General measures	: Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.	
6.1.1. For non-emergency personnel		
Protective equipment	: Wear recommended personal protective equipment.	
Emergency procedures	: Ventilate spillage area. Evacuate unnecessary personnel.	
6.1.2. For emergency responders		
Protective equipment	Do not attempt to take action without suitable protective equipment. Use personal protective equipment as required. For further information refer to section 8: "Exposure controls/personal protection".	
Emergency procedures	Stop release. Evacuate unnecessary personnel. Stop leak if safe to do so.	
6.2. Environmental precautions		
Avoid release to the environment.		
6.3. Methods and material for containment and cleaning up		
For containment	: Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.	
Methods for cleaning up	: Take up liquid spill into absorbent material. Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.	
Other information	: Dispose of materials or solid residues at an authorized site.	
6.4. Reference to other sections		
For further information refer to section 13		

For further information refer to section 13.

SECTION 7: Handling and storag	e
7.1. Precautions for safe handling	
Additional hazards when processed Precautions for safe handling Hygiene measures	<ul> <li>Not expected to present a significant hazard under anticipated conditions of normal use.</li> <li>Ensure good ventilation of the work station. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing.</li> <li>Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.</li> </ul>
7.2. Conditions for safe storage, incl	uding any incompatibilities
Technical measures Storage conditions Packaging materials	<ul> <li>Keep in a cool, well-ventilated place away from heat.</li> <li>Store in original container. Keep container tightly closed. Store in a well-ventilated place.</li> <li>Store always product in container of same material as original container.</li> </ul>
7.3. Specific end use(s)	

No additional information available

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

## 8.1.1 National occupational exposure and biological limit values

No additional information available

## 8.1.2. Recommended monitoring procedures

No additional information available

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## 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

No additional information available

## 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Wear recommended personal protective equipment.

Personal protective equipment symbol(s):



### 8.2.2.1. Eye and face protection

**Eye protection:** Chemical goggles or safety glasses

### 8.2.2.2. Skin protection

Skin and body protection: Wear a mask

Hand protection: Protective gloves

### 8.2.2.3. Respiratory protection

**Respiratory protection:** Wear appropriate mask

8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

### Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties	
9.1. Information on basic phys	sical and chemical properties
Physical state	: Liquid
Colour	: Colourless.
Appearance	: Clear liquid.
Molecular mass	: 78.13 g/mol
Odour	: garlic-like.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: 16 – 19 °C
Boiling point	: 189 °C
Flammability	: Non flammable.
Lower explosion limit	: 2.6 vol %

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Upper explosion limit	: 28.5 vol %
Flash point	: 87 °C
Auto-ignition temperature	: 215 °C
Decomposition temperature	: > 190 °C
рН	: Not available
Viscosity, kinematic	: 2.245 mm²/s
Viscosity, dynamic	: 2.47 cP at 20 °C
Solubility	: Water: Completely miscible
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: -2.03
Vapour pressure	: 0.55 hPa at 20 °C
Vapour pressure at 50°C	: Not available
Density	: 1.1 g/cm³ at 20 °C
Relative density	: Not available
Relative vapour density at 20°C	: 2.71 (Air = 1)
Particle characteristics	: Not applicable

## 9.2. Other information

## 9.2.1. Information with regard to physical hazard classes

No additional information available

## 9.2.2. Other safety characteristics

Relative evaporation rate (butylacetate=1) : 4.3

## **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

## 10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

**10.4. Conditions to avoid** 

Direct sunlight. Overheating. Open flame. Heat. Sparks.

**10.5. Incompatible materials** 

No additional information available

**10.6. Hazardous decomposition products** 

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## **SECTION 11: Toxicological information**

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified

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STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	
DIMETHYL SULPHOXIDE FOR HPLC (67-68-5)		
Viscosity, kinematic	2.245 mm²/s	
11.2. Information on other hazar	ds	

No additional information available

SECTION 12: Ecological information		
12.1. Toxicity		
Hazardous to the aquatic environment, short–term : (acute)	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. Not classified Not classified	
12.2. Persistence and degradability		
DIMETHYL SULPHOXIDE FOR HPLC (67-68-5)		
Persistence and degradability	Rapidly degradable	
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. Endocrine disrupting properties		
No additional information available		
12.7. Other adverse effects		
No additional information available		

SECTION 13: Disposal considerations	5
13.1. Waste treatment methods	
Regional waste regulation Waste treatment methods Sewage disposal recommendations Product/Packaging disposal recommendations Additional information	<ul> <li>Disposal must be done according to official regulations.</li> <li>Dispose of contents/container in accordance with licensed collector's sorting instructions.</li> <li>Disposal must be done according to official regulations.</li> <li>Disposal must be done according to official regulations.</li> <li>Do not re-use empty containers.</li> </ul>

## **SECTION 14: Transport information**

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

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14.1. UN number or ID number		
Not regulated for transport		
14.2. UN proper shipping name		
Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID)	<ul> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> </ul>	
14.3. Transport hazard class(es)		
ADR Transport hazard class(es) (ADR)	: Not regulated	
IMDG Transport hazard class(es) (IMDG)	: Not regulated	
IATA Transport hazard class(es) (IATA)	: Not regulated	
ADN Transport hazard class(es) (ADN)	: Not regulated	
RID Transport hazard class(es) (RID)	: Not regulated	
14.4. Packing group		
Packing group (ADR) Packing group (IMDG) Packing group (IATA) Packing group (ADN) Packing group (RID)	<ul> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> </ul>	
14.5. Environmental hazards		
Other information	: No supplementary information available	
14.6. Special precautions for user		
Overland transport Not regulated		
Transport by sea Not regulated		
Air transport Not regulated		
Inland waterway transport Not regulated		
Rail transport Not regulated		
14.7. Maritime transport in bulk according	g to IMO instruments	
Not applicable		

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## **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)** 

Not listed on REACH Annex XVII

### REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

#### **REACH Candidate List (SVHC)**

Not listed on the REACH Candidate List

#### PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

#### **POP Regulation (Persistent Organic Pollutants)**

Not listed on the POP list (Regulation EU 2019/1021)

## Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

### Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

### **Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

#### **Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

### 15.1.2. National regulations

### France

Occupational diseases	
Code	Description
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

#### Germany

Water hazard class (WGK)	: Not classified according to Regulation Governing Systems for Handling Substances Hazardous to Waters (AwSV).
Hazardous Incident Ordinance (12. BImSchV)	: Is not subject to the Hazardous Incident Ordinance (12. BImSchV)
Netherlands	
SZW-lijst van kankerverwekkende stoffen	: The substance is not listed
SZW-lijst van mutagene stoffen	: The substance is not listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	: The substance is not listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid	: The substance is not listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling	: The substance is not listed
Denmark	
Class for fire hazard	: Class III-1
Store unit	: 50 liter

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Classification remarks

: Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## **SECTION 16: Other information**

Abbreviations and acronyms:			
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways		
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road		
ATE	Acute Toxicity Estimate		
BCF	Bioconcentration factor		
BLV	Biological limit value		
BOD	Biochemical oxygen demand (BOD)		
COD	Chemical oxygen demand (COD)		
DMEL	Derived Minimal Effect level		
DNEL	Derived-No Effect Level		
EC-No.	European Community number		
EC50	Median effective concentration		
EN	European Standard		
IARC	International Agency for Research on Cancer		
ΙΑΤΑ	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		
LC50	Median lethal concentration		
LD50	Median lethal dose		
LOAEL	Lowest Observed Adverse Effect Level		
NOAEC	No-Observed Adverse Effect Concentration		
NOAEL	No-Observed Adverse Effect Level		
NOEC	No-Observed Effect Concentration		
OECD	Organisation for Economic Co-operation and Development		
OEL	Occupational Exposure Limit		
РВТ	Persistent Bioaccumulative Toxic		
PNEC	Predicted No-Effect Concentration		
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail		
SDS	Safety Data Sheet		
STP	Sewage treatment plant		
ThOD	Theoretical oxygen demand (ThOD)		
TLM	Median Tolerance Limit		
VOC	Volatile Organic Compounds		
CAS-No.	Chemical Abstract Service number		
N.O.S.	Not Otherwise Specified		
L	1		

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Abbreviations and acronyms:		
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

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.