# DIMETHYL SULPHOXIDE ANHYDROUS DRIED

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Reference number: 125D
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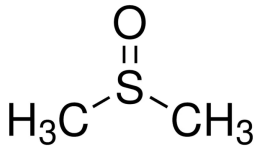
## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

| | | |
|---|---|---|
| Product form | : | Substance |
| Trade name | : | DIMETHYL SULPHOXIDE ANHYDROUS DRIED |
| EC-No. | : | 200-664-3 |
| CAS-No. | : | 67-68-5 |
| Product code | : | 0125D |
| Type of product | : | Organic compound |
| Formula | : | C2H6OS |
| Chemical structure | : |  |
| 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 | : | Laboratory chemicals<br>Manufacture of substances<br>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

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type : Mono-constituent
Name : DIMETHYL SULPHOXIDE
CAS-No. : 67-68-5
EC-No. : 200-664-3

| Name | Product identifier | % |
|---|---|---|
| DIMETHYL SULPHOXIDE | CAS-No.: 67-68-5<br>EC-No.: 200-664-3 | 100 |

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

### 4.2. Most important symptoms and effects, 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 : None under normal conditions.
Symptoms/effects after ingestion : None under normal conditions.

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

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## 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.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : 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.

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.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.

Storage conditions : Keep cool. Protect from sunlight.

Packaging materials : Store always product in container of same material as original container.

### 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

#### 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 physical 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 % |
| Upper explosion limit | : | 28.5 vol % |
| Flash point | : | 87 °C |
| Auto-ignition temperature | : | 215 °C |
| Decomposition temperature | : | > 190 °C |
| pH | : | 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 |
| Refractive index | : | 1.478 – 1.479 (20 °C, 589 nm) |

## 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

None under recommended storage and handling conditions (see section 7).

### 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 |
| STOT-single exposure | : | Not classified |
| STOT-repeated exposure | : | Not classified |
| Aspiration hazard | : | Not classified |

| DIMETHYL SULPHOXIDE ANHYDROUS DRIED (67-68-5) | |
|---|---|
| Viscosity, kinematic | 2.245 mm²/s |

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

### 12.2. Persistence and degradability

| DIMETHYL SULPHOXIDE ANHYDROUS DRIED (67-68-5) | |
|---|---|
| Persistence and degradability | Rapidly degradable |

### 12.3. Bioaccumulative potential

| DIMETHYL SULPHOXIDE ANHYDROUS DRIED (67-68-5) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | -2.03 |

### 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

### 13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Disposal must be done according to official regulations.

Additional information : Do not re-use empty containers.

## SECTION 14: Transport information

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

### 14.1. UN number or ID number

Not regulated for transport

## 14.2. UN proper shipping name

| | | |
|---|---|---|
| Proper Shipping Name (ADR) | : | Not regulated |
| Proper Shipping Name (IMDG) | : | Not regulated |
| Proper Shipping Name (IATA) | : | Not regulated |
| Proper Shipping Name (ADN) | : | Not regulated |
| Proper Shipping Name (RID) | : | Not regulated |

## 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) | : | Not regulated |
| Packing group (IMDG) | : | Not regulated |
| Packing group (IATA) | : | Not regulated |
| Packing group (ADN) | : | Not regulated |
| Packing group (RID) | : | Not regulated |

## 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 to IMO instruments

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)**

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

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 |
| IATA | 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 |
| PBT | 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 |

| 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.