

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Reference number: 4600D Issue date: 12/4/2023 Revision date: 12/4/2023 Supersedes version of: 3/15/2019 Version: 1.0

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

1.1. Product identifier

Product form Substance

Trade name METHANESULPHONIC ACID FOR SYNTHESIS

EC Index-No. 607-145-00-4 EC-No. 200-898-6 CAS-No. 75-75-2 4600D Product code CH4O3S Formula

Chemical structure

: Methylsulphonic acid, Mesylic acid, MSA Synonyms

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

Use of the substance/mixture : Laboratory chemicals

Manufacture of substances

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

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]

H290 Corrosive to metals, Category 1 H302 Acute toxicity (oral), Category 4 H312 Acute toxicity (dermal), Category 4 Skin corrosion/irritation, Category 1 H314 Specific target organ toxicity - Single exposure, Category 3, H335

Respiratory tract irritation

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

Adverse physicochemical, human health and environmental effects

May be corrosive to metals. Harmful in contact with skin. Harmful if swallowed. May cause respiratory irritation. Causes severe skin burns and eye damage.

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2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP) : Danger

Hazard statements (CLP) : H290 - May be corrosive to metals.

H302+H312 - Harmful if swallowed or in contact with skin. H314 - Causes severe skin burns and eye damage.

H335 - May cause respiratory irritation.

Precautionary statements (CLP) : P234 - Keep only in original packaging.

P280 - Wear protective clothing, eye protection, face protection, protective gloves. P301+P312 - IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

P302+P352 - IF ON SKIN: Wash with plenty of water.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water .

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

contact lenses, if present and easy to do. Continue rinsing. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

Nordic countries regulation

Denmark

MAL code : 00-3 (Executive Order No. 301 from 1993)

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 : METHANESULPHONIC ACID

CAS-No. : 75-75-2 EC-No. : 200-898-6 EC Index-No. : 607-145-00-4

Name	Product identifier	%
	CAS-No.: 75-75-2 EC-No.: 200-898-6 EC Index-No.: 607-145-00-4	100

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air

and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact : Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a

physician immediately.

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First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. If you feel unwell, seek medical advice. Do not induce vomiting. Call a

physician immediately.

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

Symptoms/effects : Causes severe skin burns and eye damage.

Symptoms/effects after inhalation : May cause respiratory irritation.
Symptoms/effects after skin contact : Harmful in contact with skin. Burns.

Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : Harmful if swallowed. Burns.

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 : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). 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. Avoid contact with skin, eyes and clothing. Do not breathe

dust/fume/gas/mist/vapours/spray.

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 : 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. Clean up immediately by sweeping or vacuum.

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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 Precautions for safe handling

- : Not expected to present a significant hazard under anticipated conditions of normal use.
- Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Use only outdoors or in a well-ventilated

Hygiene measures

: Wash hands, forearms and face thoroughly after handling. Wash contaminated clothing before reuse. 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

: Store in a well-ventilated place. Keep container tightly closed. Store in corrosive resistant container with a resistant inner liner. Keep only in original container. Store locked up. Store

in a well-ventilated place. Keep container tightly closed.

Incompatible materials

: ivietais.

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

METHANESULPHONIC ACID FOR SYNTHESIS (75-75-2)	
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	0.7 mg/m³
Peak exposure limitation factor	1(1)
Remark	AGS - Ausschuss für Gefahrstoffe; Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden; 11 - Summe aus Dampf und Aerosolen
Regulatory reference	TRGS900

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

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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 face shield

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 to light brown.

: Clear liquid. **Appearance** Molecular mass : 96.11 g/mol Odour : characteristic. Odour threshold : Not available Melting point : Not applicable Freezing point : 17 - 19 °C Boiling point : 167 °C Flammability : Non flammable.

Flammability : Non flammable.

Lower explosion limit : 11.4 vol %

Upper explosion limit : 24.3 vol %

Flash point : 189 °C

Auto-ignition temperature : Not available

Decomposition temperature : > 200 °C

pH : < 1 at 20°C

Viscosity, kinematic : 7.833 mm²/s

Viscosity, kinematic : 7.833 mm²/s
Viscosity, dynamic : 11.6 mPa·s at 25°C
Solubility : Water: Miscible in water

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Partition coefficient n-octanol/water (Log Kow) : Not available

Partition coefficient n-octanol/water (Log Pow) : 2.38

Vapour pressure: < 1 mbar at 20°C</th>Vapour pressure at 50°C: Not availableDensity: 1.481 g/cm³

Relative density : 1.478 – 1.482 at 20°C

Relative vapour density at 20°C : 3.32

Particle characteristics : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosion limits : 0.114 – 0.243 vol %

9.2.2. Other safety characteristics

No additional information available

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. Heat. High temperature.

10.5. Incompatible materials

metals.

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) : Harmful if swallowed.

Acute toxicity (dermal) : Harmful in contact with skin.

Acute toxicity (inhalation) : Not classified

Skin corrosion/irritation : Causes severe skin burns.

pH: < 1 at 20°C

Serious eye damage/irritation : Assumed to cause serious eye damage

pH: < 1 at 20°C

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

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Viscosity, kinematic 7.833 mm²/s

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

: Not classified

Hazardous to the aquatic environment, short-term

(acute

Hazardous to the aquatic environment, long-term : Not classified

(chronic)

12.2. Persistence and degradability

METHANESULPHONIC ACID FOR SYNTHESIS (75-75-2)

Persistence and degradability Rapidly degradable

12.3. Bioaccumulative potential

METHANESULPHONIC ACID FOR SYNTHESIS (75-75-2)

Partition coefficient n-octanol/water (Log Pow) 2.38

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 : Dispose of contents/container to hazardous or special waste collection point, in accordance

with local, regional, national and/or international regulation. 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

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14.1. UN number or ID number

 UN-No. (ADR)
 : UN 3265

 UN-No. (IMDG)
 : UN 3265

 UN-No. (IATA)
 : UN 3265

 UN-No. (ADN)
 : UN 3265

 UN-No. (RID)
 : UN 3265

14.2. UN proper shipping name

Proper Shipping Name (ADR) : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. Proper Shipping Name (IMDG) : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Proper Shipping Name (IATA) : Corrosive liquid, acidic, organic, n.o.s.

Proper Shipping Name (ADN) : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Proper Shipping Name (RID) : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Transport document description (ADR) : UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (METHANESULPHONIC

ACID), 8, II, (E)

Transport document description (IMDG) : UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (METHANESULPHONIC

ACID), 8, II

Transport document description (IATA) : UN 3265 Corrosive liquid, acidic, organic, n.o.s. (METHANESULPHONIC ACID), 8, II

Transport document description (ADN)

: UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., 8, II

Transport document description (RID)

: UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., 8, II

14.3. Transport hazard class(es)

ADR

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



IMDG

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



IATA

Transport hazard class(es) (IATA) : 8
Danger labels (IATA) : 8



ADN

Transport hazard class(es) (ADN) : 8
Danger labels (ADN) : 8



RID

Transport hazard class(es) (RID) : 8
Danger labels (RID) : 8

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14.4. Packing group

Packing group (ADR) : 11 Packing group (IMDG) : 11 : 11 Packing group (IATA) Ш Packing group (ADN) 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) : C3 Special provisions (ADR) : 274 Limited quantities (ADR) : 11 Excepted quantities (ADR) : E2 : P001, IBC02 Packing instructions (ADR) : MP15 Mixed packing provisions (ADR) Portable tank and bulk container instructions (ADR) : T11 Portable tank and bulk container special provisions : TP2, TP27

(ADR)

Tank code (ADR) : L4BN Vehicle for tank carriage : AT Transport category (ADR) : 2

Hazard identification number (Kemler No.) : 80

> 80 3265

Tunnel restriction code (ADR) : E EAC code : 2X

Transport by sea

Orange plates

Special provisions (IMDG) : 274 Limited quantities (IMDG) : 1L Excepted quantities (IMDG) : E2 Packing instructions (IMDG) : P001 IBC packing instructions (IMDG) : IBC02 Tank instructions (IMDG) T11 Tank special provisions (IMDG) TP2, TP27 EmS-No. (Fire) : F-A EmS-No. (Spillage) : S-B Stowage category (IMDG) В Stowage and handling (IMDG) SW2

SGG1, SG36, SG49 Segregation (IMDG)

Properties and observations (IMDG) Causes burns to skin, eyes and mucous membranes.

MFAG-No 154

Air transport

: E2 PCA Excepted quantities (IATA) PCA Limited quantities (IATA) : Y840 PCA limited quantity max net quantity (IATA) : 0.5L PCA packing instructions (IATA) : 851

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PCA max net quantity (IATA) : 1L
CAO packing instructions (IATA) : 855
CAO max net quantity (IATA) : 30L
Special provisions (IATA) : A3, A803
ERG code (IATA) : 8L

Inland waterway transport

Classification code (ADN) : C3

Special provisions (ADN) : 274

Limited quantities (ADN) : 1 L

Excepted quantities (ADN) : E2

Carriage permitted (ADN) : T

Equipment required (ADN) : PP, EP

Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : C3
Special provisions (RID) : 274
Limited quantities (RID) : 1L
Excepted quantities (RID) : E2
Packing instructions (RID) : P001, IBC02
Mixed packing provisions (RID) : MP15
Portable tank and bulk container instructions (RID) : T11
Portable tank and bulk container special provisions : TP2, TP27

(RID)

Tank codes for RID tanks (RID): L4BNTransport category (RID): 2Colis express (express parcels) (RID): CE6Hazard identification number (RID): 80

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)

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(b)	METHANESULPHONIC ACID FOR SYNTHESIS

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)

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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

Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 2144).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of 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 – : The substance is not listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

Denmark

MAL code : 00-3 (Executive Order No. 301 from 1993)

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with

the product

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

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

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1	Skin corrosion/irritation, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

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.