

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



O-METHYLISOUREASULFATE

Version 5.4 / REG_EU
Revision Date: 22.02.2019

Specification: 132069
Material no.:

Date of first issue: 22.02.2019
Print Date: 23.02.2019

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

1.1 Product identifier

Trade name : O-METHYLISOUREASULFATE
Registration number : 01-2120046073-67-0000
CAS-No. : 52328-05-9
EC-No. : 257-851-8

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

Use of the Sub-
stance/Mixture : Chemical intermediate

1.3 Details of the supplier of the safety data sheet

Company : AlzChem Trostberg GmbH
Dr.-Albert-Frank-Str. 32
83308 Trostberg, Germany
Telephone : +49 8621 86-3351
E-mail address of person
responsible for the SDS : alz-pst@alzchem.com

1.4 Emergency telephone number

Emergency telephone num-
ber : +49 8621 86-2776
AlzChem Trostberg GmbH, Fire Brigade

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Germ cell mutagenicity, Category 2 H341: Suspected of causing genetic defects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H341 Suspected of causing genetic defects.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.

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P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P308 + P313 IF exposed or concerned: Get medical advice/attention.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards

A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out
If dust occurs:
Potential skin, eye and respiratory irritant.
Danger of dust explosion.

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name : O-METHYL ISOUREA SULPHATE (2:1)

Components

Chemical name	CAS-No. EC-No.	Concentration (% w/w)
bis(2-methylisouronium)sulphate	52328-05-9 257-851-8	>= 99

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : If exposed or in case of symptoms caused by eye or skin contact, inhalation or swallowing, consult a physician.
Take off contaminated clothing and shoes immediately.

If inhaled : Move to fresh air.

In case of skin contact : Wash off immediately with plenty of water.

In case of eye contact : Rinse thoroughly with plenty of water, also under the eyelids.

If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do not induce vomiting without medical advice.

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4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Foam
Water spray

Unsuitable extinguishing media : high volume water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : nitrous gases
Sulphur oxides
Carbon oxides
Hydrocyanic acid (HCN)
Ammonia

5.3 Advice for firefighters

Special protective equipment for firefighters : In the case of fire, wear respiratory protective equipment independent of surrounding air and chemical protective suit.

Further information : Cool containers/tanks with water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Wear personal protective equipment; see section 8.
Ensure adequate ventilation.
Do not breathe dust.

6.2 Environmental precautions

Environmental precautions : Product or extinguishing water with product must not be allowed to enter soil, sewers or natural bodies of water.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Use mechanical handling equipment.
Avoid dust formation.
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling

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- Advice on safe handling : The substance must be handled under strictly controlled conditions in accordance with Article 17/18 of the REACH regulation.
Provide appropriate exhaust ventilation at machinery.
Avoid dust formation.
- Advice on protection against fire and explosion : Danger of dust explosion Avoid formation of air-dust mixtures and keep away from ignition sources (sparks, flames, open flame) to prevent dust explosions.
- Hygiene measures : Do not breathe vapours/dust. Avoid contact with skin, eyes and clothing. Take off clothing and shoes contaminated with product. Clean before reuse. Do not eat, drink or smoke while working. Wash hands, and/or face before breaks and when workday is finished. Keep away from food, drink and animal feedingstuffs.
- Dust explosion class : St1

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Keep away from heat. Keep locked up.
- Packaging material : Suitable material: polyethylene

7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Personal protective equipment

- Eye protection : Safety glasses
- Hand protection
- Material : Chloroprene, Recommendation: Camapren 722
- Break through time : > 480 min
- Glove thickness : 0,6 mm
- Directive : DIN EN 374
- Manufacturer : Kächele-Cama Latex GmbH (KCL), Germany
- Material : Nitrile rubber, Recommendation: Camatril 730
- Break through time : > 480 min
- Glove thickness : 0,4 mm
- Directive : DIN EN 374
- Manufacturer : Kächele-Cama Latex GmbH (KCL), Germany
- Skin and body protection : Protective clothing
- Respiratory protection : Do not inhale dust or aerosols, use particle filter.
Dust protection mask in accordance with EN 149 FFP2

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: solid
Colour	: colourless
Odour	: odourless
pH	: 2 - 5 (20 °C) Concentration: 430 g/l
Melting point/range	: 166 - 168 °C
Flash point	: Not applicable
Burning number	: BZ 1 - does not ignite.
Vapour pressure	: < 0,003 hPa (25 °C)
Density	: 1,59 g/cm ³ (20 °C)
Bulk density	: 680 kg/m ³
Solubility(ies) Water solubility	: 1000 g/l (20 °C)
Partition coefficient: n- octanol/water	: log Pow: 0,67 (21 °C)

9.2 Other information

Impact sensitivity	: Not sensitive to rubbing
Dust explosion class	: St1
Minimum ignition energy	: > 1 J Method: VDI 2263 with inductance

SECTION 10: Stability and reactivity

10.1 Reactivity

See section 10.3

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions	: Danger of decomposition under influence of heat., Strong production of heat.
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10.4 Conditions to avoid

Conditions to avoid : temperatures > 110 - 140 °C

10.5 Incompatible materials

Materials to avoid : Strong acids and strong bases
Strong oxidizing agents

10.6 Hazardous decomposition products

see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Components:

bis(2-methylisouronium)sulphate:

Acute oral toxicity : LD50 (Rat): 3700 mg/kg
Assessment: Based on available data, the classification criteria are not met.
Remarks: Own test result.

Acute inhalation toxicity : Maximum attainable concentration (rat): 2,133 mg/l
Exposure time: 4 h
Test substance: aerosol
GLP: yes
Assessment: Based on available data, the classification criteria are not met.
Remarks: (the maximum dose attainable under experimental conditions), no fatalities
Own test result.

Skin corrosion/irritation

Components:

bis(2-methylisouronium)sulphate:

Species : Rabbit
Exposure time : 4 h
Method : OECD Test Guideline 404
Result : No skin irritation
GLP : yes
Remarks : Own test result.

Serious eye damage/eye irritation

Components:

bis(2-methylisouronium)sulphate:

Species : Rabbit
Exposure time : 24 h

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Method : OECD Test Guideline 405
Result : slightly eye irritation
GLP : yes
Remarks : Own test result.

Respiratory or skin sensitisation

Components:

bis(2-methylisouronium)sulphate:

Remarks : no data available

Germ cell mutagenicity

Product:

Germ cell mutagenicity- Assessment : Suspected of causing genetic defects.

Components:

bis(2-methylisouronium)sulphate:

Genotoxicity in vitro : Test Type: Ames-test (Cytogenetic test)
Result: negative

Genotoxicity in vivo : Test Type: Unscheduled DNA synthesis -test (UDS)
Species: Rat
Result: positive
GLP: yes

Germ cell mutagenicity- Assessment : The product acts as methylating agent.

Carcinogenicity

Components:

bis(2-methylisouronium)sulphate:

Remarks : No data available

STOT - single exposure

Components:

bis(2-methylisouronium)sulphate:

Remarks : no data available

STOT - repeated exposure

Components:

bis(2-methylisouronium)sulphate:

Remarks : no data available

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Repeated dose toxicity

Components:

bis(2-methylisouronium)sulphate:

Species : Rat, male/female
Application Route : Oral
Exposure time : 28-day
Dose : 20, 100, 500, 1000 mg/kg
Target Organs : haemogram, liver, kidneys, spleen, no pathological changes

Target Organs : Affects the following at high dosage levels:, body weight development negative
Remarks : No deaths observed.

Aspiration toxicity

Components:

bis(2-methylisouronium)sulphate:

No data available

Further information

Product:

Remarks : No additional toxicological data are available.

SECTION 12: Ecological information

12.1 Toxicity

Components:

bis(2-methylisouronium)sulphate:

Toxicity to fish : LC50 (Leuciscus idus): 2425 mg/l
Exposure time: 48 h
GLP: yes
Remarks: Own test result.

Toxicity to microorganisms : EC 10 (Pseudomonas putida): 15600 mg/l
GLP: yes
Remarks: Own test result.

12.2 Persistence and degradability

Components:

bis(2-methylisouronium)sulphate:

Biodegradability : Biodegradation: 15 %
Related to: DOC (Dissolved Organic Carbon)
Exposure time: 28 Days
Method: OECD TG 301 E
GLP: yes

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Remarks: Not readily biodegradable.

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

12.6 Other adverse effects

Product:

Additional ecological information : No further ecotoxicological data are available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Must be brought to an adequate waste treatment facility, in conformity with applicable waste disposal regulations.

Contaminated packaging : Packaging, that can not be reused after cleaning must be disposed or recycled in accordance with all federal, national and local regulations.

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Remarks : Not classified as dangerous in the meaning of transport regulations.

ADR
Remarks : Not regulated as a dangerous good
: Not classified as dangerous in the meaning of transport regulations.

RID
Remarks : Not regulated as a dangerous good
: Not classified as dangerous in the meaning of transport regulations.

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lations.

IMDG : Not regulated as a dangerous good
Remarks : Not classified as dangerous in the meaning of transport regulations.

IATA (Cargo) : Not regulated as a dangerous good
Remarks : Not classified as dangerous in the meaning of transport regulations.

IATA_P (Passenger) : Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

15.2 Chemical safety assessment

No substance safety assessment is required for this product because it is an internal local intermediate product and/or a transported intermediate product.

SECTION 16: Other information

Full text of other abbreviations

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; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration

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to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

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 a 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.

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