# Chemical Safety Data Sheet MSDS / SDS

# (S)-(-)-METHYL P-TOLYL SULFOXIDE

Revision Date:2023-11-29 Revision Number:1

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

### **Product identifier**

Product name	: (S)-(-)-METHYL P-TOLYL SULFOXIDE		
CBnumber	: CB4364364		
CAS	: 5056-07-5		
Synonyms	: (S)-(-)-METHYL P-TOLYL SULFOXIDE		
Relevant identified uses of the substance or mixture and uses advised against			
Relevant identified uses	: For R&D use only. Not for medicinal, household or other use.		
Uses advised against	: none		
Company Identification			
Company	: Chemicalbook		
Address	: Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing		
Telephone	: 400-158-6606		

# SECTION 2: Hazards identification

### GHS Label elements, including precautionary statements

Pictogram(s)			
Signal word	Warning		
Hazard statement(s)			
H315 Causes skin irritation			
H319 Causes serious eye irritation			
H335 May cause respiratory irritation			
Prevention			
P264 Wash thoroughly after handling.			
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/			
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.			
P271 Use only outdoors or in a well-ventilated area.			
Response			
P302+P352 IF ON SKIN: Wash with plenty of water/			
P321 Specific treatment (see on this label).			

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P332+P317 If skin irritation occurs: Get medical help.

P362+P364 Take off contaminated clothing and wash it before reuse.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P319 Get medical help if you feel unwell.

#### Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

#### Disposal

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

# SECTION 3: Composition/information on ingredients

#### Substance

Product name	: (S)-(-)-METHYL P-TOLYL SULFOXIDE
Synonyms	: (S)-(-)-METHYL P-TOLYL SULFOXIDE
CAS	: 5056-07-5
MF	: C8H10OS
MW	: 154.23
CAS MF	: 5056-07-5 : C8H10OS

# SECTION 4: First aid measures

### Description of first aid measures

#### lf inhaled

After inhalation: fresh air.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

#### If swallowed

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

#### Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### Indication of any immediate medical attention and special treatment needed

No data available

# **SECTION 5: Firefighting measures**

### **Extinguishing media**

#### Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder

#### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

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

Carbon oxides Sulfur oxides Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

### Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

#### **Further information**

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

# SECTION 6: Accidental release measures

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

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

#### **Environmental precautions**

Do not let product enter drains.

### Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

#### **Reference to other sections**

For disposal see section 13.

# SECTION 7: Handling and storage

#### Precautions for safe handling

For precautions see section 2.2.

### Conditions for safe storage, including any incompatibilities

## Storage conditions

Tightly closed. Dry.

#### Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# SECTION 8: Exposure controls/personal protection

#### control parameter

#### Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

#### **Exposure controls**

#### Personal protective equipment

#### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety

#### glasses

#### Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min

Material tested:KCL 741 Dermatril? L

Splash contact Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min

Material tested:KCL 741 Dermatril? L

#### **Respiratory protection**

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other

accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P1

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains.

# SECTION 9: Physical and chemical properties

#### Information on basic physicochemical properties

Appearance	white crystalline
Odour	No data available
Odour Threshold	No data available
рН	No data available
Melting point/freezing point	Melting point/range: 75 - 77 °C
Initial boiling point and boiling range	282.4±19.0 °C(Predicted)
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive	No data available
limits	
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Explosive properties	No data available
Oxidizing properties	No data available

### Other safety information

No data available

# SECTION 10: Stability and reactivity

#### Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

#### **Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature) .

### Possibility of hazardous reactions

No data available

### Conditions to avoid

no information available

#### Incompatible materials

Strong oxidizing agents

#### Hazardous decomposition products

# SECTION 11: Toxicological information

Information on t	toxicological	effects
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Acute toxicity
No data available
Skin corrosion/irritation
No data available
Serious eye damage/eye irritation
No data available
Respiratory or skin sensitization
No data available
Germ cell mutagenicity
No data available
Carcinogenicity
No data available
Reproductive toxicity
No data available
Specific target organ toxicity - single exposure
No data available
Specific target organ toxicity - repeated exposure
No data available
Aspiration hazard
No data available

# SECTION 12: Ecological information

### Toxicity

No data available

### Persistence and degradability

No data available

### **Bioaccumulative potential**

No data available

### Mobility in soil

No data available

### Results of PBT and vPvB assessment

very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### Other adverse effects

No data available

# **SECTION 13: Disposal considerations**

#### Waste treatment methods

#### Product

See www.retrologistik.com for processes regarding the return of chemicals and

containers, or contact us there if you have further questions.

# **SECTION 14: Transport information**

#### **UN number**

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

Transport hazard class(es) 14.3 ADR/RID: - IMDG: -	IATA: -
Packaging group 14.4 ADR/RID: - IMDG: -	IATA: -
Environmental hazards 14.5 ADR/RID: no IMDG Marine pollutant: no	IATA: no

# Special precautions for user

#### **Further information**

Not classified as dangerous in the meaning of transport regulations.

# **SECTION 15: Regulatory information**

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

### Regulations on the Safety Management of Hazardous Chemicals

China Catalog of Hazardous chemicals 2015:Not Listed. website: https://www.mem.gov.cn/

#### Measures for Environmental Management of New Chemical Substances

Korea Existing Chemicals List (KECL):Not Listed. website: http://ncis.nier.go.kr

EC Inventory:Not Listed.

European Inventory of Existing Commercial Chemical Substances (EINECS):Not Listed. website: https://echa.europa.eu/

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Not Listed. website: https://www.mee.gov.cn/

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Not Listed. website: https://emb.gov.ph/

Vietnam National Chemical Inventory:Not Listed. website: https://chemicaldata.gov.vn/ New Zealand Inventory of Chemicals (NZIoC):Not Listed. website: https://www.epa.govt.nz/ United States Toxic Substances Control Act (TSCA) Inventory:Not Listed. website: https://www.epa.gov/

# **SECTION 16: Other information**

#### Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

#### References

[1] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

[2] ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

[3] ECHA - European Chemicals Agency, website: https://echa.europa.eu/

[4] eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en

[5] ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg

[6] Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp

[7] HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

[8] IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/

[9] IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home

[10] Sigma-Aldrich, website: https://www.sigmaaldrich.com/

**Disclaimer:** 

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.