



SAFETY DATA SHEET

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : D 10629
Product Name : DIMETHYL SULPHOXIDE

Manufacturer / supplier identification

Company : NICE Chemicals (P) Ltd. , Cochin , India
Tel - 0484 2800212 , 2802755

Contact For Information : Tel . No. – 0484 2802536 Fax : 0484 2802483
Emergency Telephone No. : 0484 2801583 Tele fax No. : 0484 2802483

2. COMPOSITION / INFORMATION ON INGREDIENTS

Synonyms : DMSO
CAS-No : 67-68-5
EC-Index-No : .-----
EC –No. : 200-664-3
Molar mass : 78.13 g/mol
Chemical formula : $(\text{CH}_3)_2\text{SO}$
Formula Hill : $\text{C}_2\text{H}_6\text{O}_\text{s}$

3. HAZARDS IDENTIFICATION : No hazardous product as specified in Directive 67/548/EEC.



SAFETY DATA SHEET

Catalogue No. : **D 10629**
Product Name : **DIMETHYL SULPHOXIDE**

4. FIRST AID MEASURES

After skin contact : Wash off with plenty of water.

Remove contaminated clothing.

After eye contact : Rinse out with plenty of water with the eyelid held wide open.

After inhalation: fresh air.

After swallowing : Make victim drink plenty of water. Subsequently administer : activated charcoa;(20 –40 g in 10% slurry).

Laxative: Sodium sulfate(1 table spoon/1/4 water). Call in physician.

5. FIRE–FIGHTING MEASURES

Suitable extinguishing media : Water, foam, powder.

Special risks : Combustible. Vapours heavier than air. Formation of hazardous combustion gases or vapours possible in the event of fire.

The following may develop in event of fire: sulfur oxides.

Special protective equipments for fire fighting: Do not stay in dangerous zone without self-contained breathing apparatus.

Other information: Prevent fire-fighting water from entering surface water or ground water.

6. ACCIDENTAL RELEASE MEASURES

Person-related precautionary measures : Avoid substance contact.

Do not inhale vapours /aerosols.

Environmental –protection measures: Do not allow to enter sewerage system .



SAFETY DATA SHEET

Catalogue No. : **D 10629**
Product Name : **DIMETHYL SULPHOXIDE**

Procedures for cleaning/absorption: Take up with liquids-absorbent material (e.g. Chemizorb @). dry. Forward for disposal. Clean up effected area.

7. HANDLING AND STORAGE

Handling : No further requirements.

Storage : Tightly closed . Dry. In a well –ventilated place.

Storage temperature: no restrictions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection : Required when vapours/aerosols are generated.

Filter A(acc. To DIN 3181) for vapours of organic compounds.

Eye protection : required

Hand protection : required

Protective clothing should be selected specifically For the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Industrial hygiene : Change contaminated clothing .Apply skin –protective barrier cream . Wash hands after working with substance.



SAFETY DATA SHEET

Catalogue No. : **D 10629**
Product Name : **DIMETHYL SULPHOXIDE**

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Liquid
Colour : Colourless
Odour : Odourless
pH value : Not available
Viscosity dynamic (20°C) : 2.14 mPa*s
Melting temperature : 18.5° C
Boiling temperature (1013 hPa): 189° C
Ignition temperature : 300-302° C
Flash point : 95° C o.c. 87° C c.c.
Explosion limits lower : 1.8 vol%
Upper : 63.0 vol%
Vapour pressure (20°C): 0.6 hPa
Relative vapour density : 2.7
Density (20°C) : 1.10 g/cm³
Bulk density : ----
Solubility in water(20°C) : Soluble
Ethanol : Soluble
Ether : Soluble
Thermal decomposition : > 190 °C
Log Pow : -1.35 (experimental)
Refractive index (20oC) : 1.48



SAFETY DATA SHEET

Catalogue No. : **D 10629**
Product Name : **DIMETHYL SULPHOXIDE**

10. STABILITY AND REACTIVITY

Conditions to be avoided : Strong heating.

Substance to be avoided : Alkali metals ,hydrides, nitrates,halogen-halogen compounds, perchloric acid, perchlorates, chlorates, non- metallic oxy halides, oxy halogenic compounds, acid halides, nitrogen oxides, sulfur oxides, strong oxidizing agents.

Hazardous decomposition products : In the event of fire: See chapter 5.

Further information : hygroscopic; inflammable; solvent;

Incompatible with various plastics, meals(in the presence of atmospheric oxygen and /or moisture);

Explosible with air in a vapours/gaseous state when heated.

11. TOXICOLOGICAL INFORMATION

Acute toxicity : LD₅₀ (oral, rat) : 14500 mg/kg.

LD₅₀(dermal, rabbit) : > 40000 mg/kg.

Specific symptoms in animal studies:

Eye irritation test (rabbit) : Slight irritations.

Skin irritation test (rabbit) : Slight irritations.

Subacute to chronic toxicity : Sensitization:

Sensitization test (guinea pig): negative.

No indication of carcinogenic activity.

No indication of mutagenic activity.

Bacterial mutagenicity: Ames test: negative.

No teratogenic effect in animal experiments.



SAFETY DATA SHEET

Catalogue No. : **D 10629**
Product Name : **DIMETHYL SULPHOXIDE**

Further toxicological information : After skin contact : Slight irritations.

Danger of skin absorption.

After eye contact : Slight irritations .

Possible symptoms : After uptrake : CNS disorders, nausea, tiredness, headache.

Possible damages : Damages of : liver ,kidneys.

Further data: Further hazardous properties cannot be excluded. The product should be handled with the care usual when dealing with chemicals.

12. ECOLOGICAL INFORMATION

Abiotic degradation: Rapid degradation.(air)

Biologic degradation : Biodegradation : 3.1 %/14 d.

Biologically not readily degradable.

Behaviour in environmental compartments:

Distribution : log p(o/w) : -1.35 (experimental).

No bioaccumulation is to be expected (log p(o/w)<1).

Ecotoxic effects : Biological effects:

Fish toxicity : L. macrochirus LC₅₀ : 33500 mg/l/48 h.

Bacterial toxicity: activated sludge EC₅₀ : 10-100 mg/l/30 min.

Further ecologic data: Do not allow to enter waters, waste water, or soil.



SAFETY DATA SHEET

Catalogue No. : **D 10629**
Product Name : **DIMETHYL SULPHOXIDE**

13. DISPOSAL METHOD

Chemicals must be disposed of in compliance with the respective national regulations. Under [www. retrologistik.de](http://www.retrologistik.de) you will find country- and substance-specific information as well as contact partners. Nice product packaging must be disposed of in compliance with the country- specific regulations or must be passed to a packaging return system. Under www. retrologistik.de you will find special information on the respective national conditions as well as contact partners.

14. TRANSPORT INFORMATION : Entire package : Not subject to transport regulations.

15. REGULATORY INFORMATION

Labelling according to EC Directives

Symbol : -----
R-phrases : -----
S-phrases : -----
Water pollution class : ----

16. OTHER INFORMATION

Chapter 15 : Deletion of labelling as hazardous substance after re-evaluation.
Chapter 8 : Specific control parameter.
Chapter 12 : Ecological information.

General update.



SAFETY DATA SHEET

Catalogue No. : **D 10629**
Product Name : **DIMETHYL SULPHOXIDE**

Regional representation :

The information is given on the authorised Safety Data Sheet for your country.

The information contained here in is based on the present state of our knowledge.

It characterizes the product with regard to the appropriate safety precautions.

It does not represent a guarantee of the properties of the product.
