

SAFETY DATA SHEET

Issue Date: 1-15-20 **Version**: 5.50

1. IDENTIFICATION

Product Identifier

Product Name Dimethyl Sulfoxide (DMSO)

Product Code

Recommended use of the chemical and restrictions on use

Recommended use Solvent for manufacturing and

High Purity Lab Solvent.

Details of the supplier of the safety data sheet

Supplier Address DMSO Store, Inc.

3580 SW 30th Ave

Fort Lauderdale, Florida 33312

Emergency Telephone Number

 Company Phone Number
 954-689-7111

 Emergency Telephone (24 hr.)
 772-834-3947

2. HAZARDS IDENTIFICATION

Classification Combustible liquid

Hazard Pictograms None

Ingredients with unknown Toxicity None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Dimethyl Sulfoxide CAS No. 67-68-5 % wt. 100

4. FIRST AID MEASURES

Eye Contact Do not rub eye. Remove contact lenses Rinse immediately with plenty of water, also under the

eyelids, for at least 15 Minutes. If eye irritation persist: Get medical attention.

Skin Contact If skin irritation does occur, flush with plenty of water. A skin assay performed in rabbit revealed

no more than a slight or well-defined erythema, which disappeared in 3 days.

Inhalation May cause respiratory irritation. Remove to fresh air.

Ingestion If swallowed get medical attention. Do not induce vomiting unless directed to do so by medical

personnel. Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

<u>Suitable Extinguishing Media</u> Dry chemical. Carbon dioxide (CO2), water spray or regular

foam.

<u>Unsuitable Extinguishing Media</u>

Do not use straight streams.

Specific Hazards Arising from the Chemical Product is Combustible.

Products of Combustion Oxides of carbon. Oxides of Sulphur.

<u>Protective equipment and precautions for firefighters</u>
As in any fire, wear SCBA and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Use personal protection recommended in Section 8.

Environmental Precautions Prevent entry into waterways, or sewers.

Methods and materials for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Rinse area thoroughly. Spill area may be slippery.

7. HANDLING AND STORAGE

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use personal

protection recommended in Section 8.

Incompatible Materials Strong Oxidizers, and Perchlorates

Storage Store in a well-ventilated place. Keep cool. Store away from incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Component Dimethyl Sulfoxide

ACGIH No TLV established.

OSHA No PEL established.

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas. Eyewash stations.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear safety glasses with side shields.

Skin and Body Protection May cause transient irritation on prolonged contact.

Respiratory Protection No protection is ordinarily required under normal conditions of use.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Liquid.

Appearance Clear, colorless liquid.

Color Colorless.

<u>Property</u> <u>Values</u>

pH Not available.

Melting Point/Freezing Point 65.3° F

Flash Point 188° F Closed Cup

Upper Flammability limits N/A

Lower Flammability limits N/A

Vapor Pressure 59.4 Pa at 68° F

Boiling Point Range 372.2° F

Relative Density 1.1 water = 1 Miscible

Water Solubility in water Odorless

Odor Not available

VOC

10. STABILITY AND REACTIVITY

Reactivity Not reactive under normal conditions.

<u>Chemical Stability</u> Stable under recommended storage conditions.

<u>Hazardous Reactions</u> None under normal conditions.

Conditions to Avoid None known.

<u>Incompatible Materials</u> Strong oxidizers, Perchlorates.

<u>Hazardous Decomposition Products</u> Thermal oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye Contact May cause eye irritation. Signs and symptoms may include redness, swelling,

tearing, and blurry vision. DMSO is only slightly irritating to the eye. In studies of human eyes, a solution containing 50 to 100% DMSO caused transient

sensation of burning which was reversible within 24 hours.

Skin Contact May cause skin irritation. Signs and symptoms may include localized redness,

swelling and itching. Dimethyl Sulfoxide may accelerate skin absorption of other materials. A skin irritation assay performed on rabbit revealed no more than a

very slight or well-defined erythema, which disappeared in 3 days.

Inhalation Not an expected route of exposure. May cause respiratory irritation in high air

concentrations.

Ingestion May cause gastrointestinal irritation. Symptoms may include stomach upset,

nausea, vomiting and diarrhea.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Dimethyl Sulfoxide	14500 mg/kg rat	40000 mg/kg rat	5330 mg/m rat

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long term exposures

Carcinogenicity This product does not contain any carcinogenic or potential carcinogens as listed by OSHA, IARC

Mutagenicity

No genotoxic activity was observed for DMSO in gene mutations assays in Salmonella typhimurium, an in vitro cytogenetics assay in CHO cells and an in vivo micronucleus assay in rats. With few exceptions, a large number of studies confirmed the lack of genotoxic potential

12. ECOLOGICAL INFORMATION

Ecotoxicity

This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Chemical name	Algae/Aquatic Plants	Fish	Toxicity to Microorganisms	Crustacea

Persistence/Degradability DMSO is not considered as persistent in the environment.

<u>Bioaccumulation</u> DMSO has a low potential for bioaccumulation.

Mobility Not determined

Other Adverse Effects Not determined

13. DISPOSAL CONSIDERATIONS

<u>Disposal Instructions</u> Disposal should be in accordance with applicable regional, national and local laws and

regulations.

14. TRANSPORT INFORMATION

DOT Not Regulated in single containers less than 119 gallons.

IATA Not Regulated

<u>IMDG</u> Not Regulated

15. REGULATORY INFORMATION

Chemical Inventories

TSCA

All Ingredients are listed in compliance with the chemical notification requirements of TSCA.

US Federal Regulations

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200

SARA 313

Not Listed

CWA (Clean water Act)

This product does not contain any substance regulated as pollutants pursuant to the clean water act (40 CFR 122.21 and (40 CFR 122.42).

US State Regulations

Not determined.

California Proposition 65

This product does not contain any chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Massachusetts

US Massachusetts Right to know law, no components are listed.

New Jersey

US New Jersey Right to know Act.

Component: Dimethyl Sulfoxide RTK List SHHS.

Pennsylvania

US Pennsylvania Worker and Community Right to know law, no components listed.

16. OTHER INFORMATION

<u>NFPA</u>

Health Hazards	Flammability	Instability	Special Hazards
1	1	0	None determined

<u>HMIS</u>

Health Hazards	Flammability	Physical Hazards	Personal Protection
1	1	1	A= Goggles

<u>Issue Date</u> 1/15/2020

Disclaimer

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 designated only as a guidance for safe handling, use, processing, storage, transportation, and disposal. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for their own particular use.

End of Safety Data Report