



Material Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section I. Product and Company Identification	
Product Name Dimethyl Sulfoxide (DMSO)	Item Code 30-3287
Commercial Name Not available.	CAS# 67-68-5
Synonym(s) Not available.	RTECS PV6210000
	In case of emergency contact: CHEMTREC (24hr) 1-800-424-9300
Supplier PCCA 9901 South Wilcrest Houston, TX 77099	Phone 1-800-331-2498 Fax 1-800-874-5760

Section II. Composition and Information on Ingredients				
Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Dimethyl Sulfoxide (DMSO)	67-68-5	100		

Section III. Hazards Identification	
Potential Acute Health Effects	Extremely hazardous in case of ingestion. Very hazardous in case of eye contact (irritant), of inhalation. Hazardous in case of skin contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.
Potential Chronic Health Effects	CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to blood, kidneys, lungs, the nervous system, liver, mucous membranes. The substance may be toxic to gastrointestinal tract. Repeated or prolonged exposure to the substance can produce target organs damage. Effects

Section IV. First Aid Measures	
Eye Contact	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention immediately.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention. Serious Skin Contact:: Wash with a disinfectant soap and cover with an antibacterial cream. Seek medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
Other	

Section V. Fire and Explosion Data	
Flash Points	CLOSED CUP: 87°C (188.6°F). OPEN CUP: 95°C (203°F).
Flammable Limits	LOWER: 2.6% UPPER: 28.5%
Products of Combustion	These products are carbon oxides (CO, CO2), sulfur oxides (SO2, SO3...).
Fire Hazards	Not available.
Explosion Hazards	Not available.



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Fire Fighting Media and Instructions

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam.

Extinguishing Media to Avoid

Do not use water jet.

Other

Combustible.

Section VI. Accidental Release Measures

Spill Cleanup Instructions

SMALL SPILL: Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements. LARGE SPILL: Combustible material. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. If the product is in its solid form: Use a shovel to put the material into a convenient waste disposal container. If the product is in its liquid form: Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section VII. Handling and Storage

Handling and Storage Info.

Handling: Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Storage: Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

Section VIII. Exposure Controls/Personal Protection

Personal Protection

Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Other Protective Measures and Equipment

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Exposure Limits

Not available.

Section IX. Physical and Chemical Properties

Appearance

Clear colorless liquid.

Odor

Not available.

Molecular Weight

78.13 g/mole

Boiling Point

189°C (372.2°F)

Melting Point

18.45°C (65.2°F)

Specific Gravity

1.1008 (Water = 1)

Vapor Pressure

0.1 kPa (@ 20°C)

Vapor Density

2.7 (Air = 1)

Viscosity

Not available.

Solubility

Easily soluble in cold water, hot water.

Other

Section X. Stability and Reactivity Data

Stability

The product is stable.

Conditions to Avoid

Not available.

Materials to Avoid

Not available.

Other

Corrosivity: Non-corrosive in presence of glass. Hazardous polymerization will not occur.

Section XI. Toxicological Information

Routes of Entry Absorbed through skin. Eye contact. Inhalation. Ingestion.

Toxicity Data Acute oral toxicity (LD50): 7920 mg/kg [Mouse]. Extremely hazardous in case of ingestion. Very hazardous in case of inhalation. Hazardous in case of skin contact (irritant).

Section XII. Ecological Information

Information Products of Biodegradation: Possibly hazardous short-term degradation products are not likely. However, long-term degradation products may arise. Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Section XIII. Disposal Considerations

Waste Disposal Recycle to process, if possible. Consult your local or regional authorities.

Section XIV. Transport Information

DOT Classification CLASS 3: Combustible liquid : FLAMMABLE LIQUIDS, N.O.S. UNNA: UN1993 PG: Not available.

Section XV. Other Regulatory Information

Regulations

Other

Section XVI. Other Information

Other