

Dimethyl Sulfoxide Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Dimethyl Sulfoxide

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261
Chemtrec Emergency Phone Number: (800) 424-9711

Signal Word
WARNING

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Flammable liquids (Category 3). Combustible liquid (H227). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

Hazard class: Sensitization, skin (Category 1). May cause an allergic skin reaction (H317). Avoid breathing mist, vapors or spray (P261).

Hazard class: Serious eye damage or irritation (Category 2A). Causes serious eye irritation (H319).

Pictograms



SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Dimethyl sulfoxide	67-68-5	(CH ₃) ₂ SO	78.13	
Synonyms: Methyl sulfoxide; DMSO				

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists eyes:** Get medical advice or attention (P337+P313).

If on skin: Wash with plenty of water (P302+P352). **If skin irritation or rash occurs:** Get medical advice or attention (P333+P313). **If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Class IIIB combustible liquid.

Flash point: 95 °C Flammable limits: Lower: 2.6% Upper: 42% Autoignition Temperature: 215 °C

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher (P370+P378).

NFPA Code

H-2

F-2

R-0

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and ventilate area. Contain the spill with sand or other inert absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #7. Store with sulfides, polysulfides, sulfoxides, and nitriles.

Store in a cool, dry place. Keep cool (P235).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Contaminated work clothing should not be allowed out of the workplace (P272). Wash hands thoroughly after handling (P264).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless liquid. Odor of smoked oysters.

Soluble: Water and most organic solvents

Boiling point: 189 °C

Melting point: 18 °C

Refractive index: 1.4793

Specific gravity: 1.101

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with acid chlorides, phosphorus halides, strong acids, strong oxidizers, and strong reducers.

Shelf life: Fair. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Sensitizer, irritant.

Chronic effects: N.A.

Target organs: Eyes, skin.

ORL-RAT LD₅₀: 14500 mg/kg

IHL-RAT LC₅₀: N.A.

SKN-RBT LD₅₀: 40 g/kg

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #18b is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (200-664-3).

SECTION 16 — OTHER INFORMATION

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N.A. = Not available, not all health aspects of this substance have been fully investigated.

N/A = Not applicable

Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.

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