

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 308.10

Revision Date: July 28, 2011

### 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) 424-9300

### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Dimethyl sulfoxide

Synonym: methyl sulfoxide, DMSO

CAS#: 67-68-5

### SECTION 3 — HAZARDS IDENTIFICATION

Colorless liquid. Odor of smoked oysters.

Combustible liquid. This substance is readily absorbed through the skin and will allow any substance dissolved in it to also be absorbed through the skin. Take caution when using this substance as a solvent.

#### FLINN AT-A-GLANCE

Health-0

Flammability-1

Reactivity-0

Exposure-0

Storage-0

0 is low hazard, 3 is high hazard

### SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

### SECTION 5 — FIRE FIGHTING MEASURES

Class IIIB combustible liquid.

Flash point: 95 °C Flammable limits: Lower: 3.5% Upper: 42% (63%) Autoignition Temperature: 301 °C

When heated to decomposition, emits toxic fumes of SO<sub>x</sub>.

**Fire Fighting Instructions:** Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

#### NFPA CODE

H-1

F-1

R-0

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area. 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.

Use and dispense in a hood. Store in a cool, dry place.

### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and a chemical-resistant apron. Use exhaust ventilation to keep airborne concentrations low.

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Colorless liquid. Odor of smoked oysters.  
Solubility: Soluble in water and most organic solvents.  
Formula:  $(\text{CH}_3)_2\text{SO}$   
Formula weight: 78.14

Boiling point: 189 °C  
Melting point: 18 °C  
Refractive index: 1.4793  
Specific gravity: 1.101

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with acid chlorides, phosphorus halides, strong acids, strong oxidizers, and strong reducers.  
Shelf life: Fair

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Sensitizer, irritant.  
Chronic effects: N.A.  
Target organs: Eyes, skin.

ORL-RAT LD<sub>50</sub>: 14500 mg/kg  
IHL-RAT LC<sub>50</sub>: N.A.  
SKN-RBT LD<sub>50</sub>: 40 g/kg

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

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply, before proceeding.  
Flinn Suggested Disposal Method #18b is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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

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**SECTION 15 — REGULATORY INFORMATION**

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

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**SECTION 16 — OTHER INFORMATION**

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