

# Material Safety Data Sheet

## Methyl Sulfonyl Methane (MSM)

### SECTION 1 - CHEMICAL PRODUCT

Product name Methyl Sulfonyl Methane (MSM)

### SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

Chemical name Methyl Sulfonyl Methane (MSM)

CAS No. 67-71-1

Molecular formula  $C_2H_6SO_2$

### SECTION 3 - HAZARDS IDENTIFICATION

Adverse effects Adverse effects may include gas, bloating, and heartburn.  
Possible allergic reaction to material if inhaled, ingested or in contact with skin.

Overdose effects Ingestion of large amounts may cause cardiac arrhythmias and central nervous depression

Acute conditions Possible eye, skin, gastrointestinal and/or respiratory tract irritation

Chronic conditions Possible hypersensitization

Medical conditions aggravated

by exposure Hypersensitivity to material, bleeding problems, and gallstones.

### SECTION 4 - FIRST AID MEASURES

Eye May cause irritation. Flush with copious quantities of water.

Skin May cause irritation. Flush with copious quantities of water.

Inhalation May cause irritation. Remove to fresh air.

Ingestion May cause irritation. Flush out mouth with water.

#### General First Aid Procedures:

Remove from exposure. Remove contaminated clothing. Persons developing serious hypersensitivity (anaphylactic) reactions must receive immediate medical attention. If person is not breathing give artificial respiration. If breathing is difficult give oxygen. Obtain medical attention immediately.

### SECTION 5 - FIRE FIGHTING MEASURES

Suitable extinguisher media	Water spray, dry chemical, carbon dioxide or foam as appropriate for surrounding fire and material.
Firefighting procedures	As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing.
Fire and Explosion Hazards	This material is assumed to be combustible. As with all dry powders it is advisable to ground mechanical equipment in contact with dry material to dissipate the potential buildup of static electricity.

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

Procedure(s) of personal precaution(s)	Wear approved respiratory protection, chemically compatible gloves and protective clothing.
Methods for cleaning up	Wipe up spillage or collect spillage using a high efficiency vacuum cleaner. Avoid breathing dust. Place spillage in appropriately labeled container for disposal.

### SECTION 7 - HANDLING and STORAGE

Handling	Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Avoid contact with skin, eyes and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.
Storage	Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Store in a tightly closed container.

## SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls	Safety shower and eye bath. Mechanical exhaust required. Use non-sparking tools.
Personal Protective Equipment:	
Respiratory	Government-approved respirator
Hand	Compatible chemical-resistant gloves
Eye	Chemical safety goggles
General Hygiene Measures	Wash thoroughly after handling. Wash contaminated clothing before reuse.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Colour	Brown
Form	Fine powder
Odor	Aromatic odor

## SECTION 10 - STABILITY AND REACTIVITY

### Stability

Stable under normal temperatures and pressures.

Materials to avoid                      Incompatible materials, ignition sources, excess heat.

### Reactivity

Hazardous decomposition products                      Carbon monoxide, carbon dioxide.

Hazardous polymerization                      Has not been reported.

## SECTION 11 - TOXICOLOGICAL INFORMATION

Oral rat	n/f
Oral mouse	n/f
NTP	Not IARC; not OSHA.
Irritancy data	n/f
Other toxicity data	n/f
Corrosivity	n/f
Sensitization data	n/f
Other carcinogenicity data	n/f

### Mutagenicity Data:

[6]-gingerol and shogaols, which are constituents of ginger, showed mutagenicity in a salmonella/microsome assay, and [6]-gingerol increased mutagenesis in a strain of E. coli. However, the mutagenicity of [6]-gingerol and shogaols was suppressed in the presence of zingerone, another constituent of ginger.

Reproductive and Developmental Effects:

No birth defects were observed in a study involving infants born to women who received 250 mg of ginger 4 times daily orally.

## SECTION 12 - ECOLOGICAL INFORMATION

No data available.

## SECTION 13 - DISPOSAL CONSIDERATIONS

Waste disposal methods	Dispose of waste in accordance with all applicable Federal, State and local laws.
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## SECTION 14 - TRANSPORT INFORMATION

IATA	Not regulated as a hazardous material.
IMO	Not regulated as a hazardous material.
RID/ADR	Not regulated as a hazardous material.

## SECTION 15 - REGULATORY INFORMATION

Health & Safety Reporting List	None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules	None of the chemicals in this product are under a Chemical Test Rule.

## SECTION 16 - OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.