Material Safety Data Sheet
Methanesulfonic Acid Certified

ACC# 91645

Section 1 - Chemical Product and Company Identification

MSDS Name: Methanesulfonic Acid Certified
Catalog Numbers: O6106-1L, O61061, O61061L, O6106250
Synonyms: MSA
Company Identification:
Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410
For information, call: 201-796-7100
Emergency Number: 201-796-7100
For CHEMTREC assistance, call: 800-424-9300
For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
75-75-2	Methanesulfonic Acid	ca. 100%	200-898-6

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colorless liquid.
Danger! Corrosive. Causes eye and skin burns. Harmful if swallowed. May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract irritation with possible burns. May cause central nervous system effects. May cause cardiac disturbances. Moisture sensitive.
Target Organs: Central nervous system, cardiovascular system.

Potential Health Effects
Eye: Causes eye burns. May cause chemical conjunctivitis and corneal damage.
Skin: Causes skin burns. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color.
Ingestion: Harmful if swallowed. May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns. May cause systemic toxicity with acidosis. May cause perforation of the digestive tract. May cause cardiac disturbances. May cause central nervous system effects. May cause systemic effects.
Inhalation: Causes chemical burns to the respiratory tract. Aspiration may lead to pulmonary edema. Central nervous system effects may include confusion, ataxia (failure of muscular coordination), vertigo, tinnitus, weakness, disorientation, lethargy, drowsiness, and finally coma. May cause cardiac abnormalities. May cause systemic effects. Exposure may produce metabolic acidosis.
Chronic: Effects may be delayed.

Section 4 - First Aid Measures

Eyes: Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).
Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.
Ingestion: Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.
Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Containers may explode in the heat of a fire. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Vapors may form an explosive mixture with air. Combustible material; may burn but does not ignite readily. Runoff from fire control or dilution water may cause pollution.
Extinguishing Media: Use water spray to cool fire-exposed containers. Do NOT get water inside containers. For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray.
Flash Point: 188 deg C (370.40 deg F)
Autoignition Temperature: Not applicable.
Explosion Limits, Lower: Not available.
Upper: Not available.
NFPA Rating: (estimated) Health: 3; Flammability: 1; Instability: 1

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation. Do not get water inside containers.

Section 7 - Handling and Storage

Handling: Use only in a well-ventilated area. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Do not allow contact with water. Discard contaminated shoes. Keep from contact with moist air and steam.
Storage: Keep container closed when not in use. Corrosives area. Store protected from moisture.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.
Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Methanesulfonic Acid	none listed	none listed	none listed

OSHA Vacated PELs: Methanesulfonic Acid: No OSHA Vacated PELs are listed for this chemical.
Personal Protective Equipment
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: colorless
Odor: Not available.
pH: Not available.
Vapor Pressure: 1 mbar @ 29 deg C
Vapor Density: 3.31
Evaporation Rate: Not available.
Viscosity: Not available.
Boiling Point: 167 deg C
Freezing/Melting Point:18 deg C
Decomposition Temperature: Not available.
Solubility: Reacts.
Specific Gravity/Density:1.3450g/cm3
Molecular Formula:CH4O3S
Molecular Weight:96.10

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions. Moisture sensitive.
Conditions to Avoid: Moisture, excess heat, reducing agents.
Incompatibilities with Other Materials: Moisture, amines, bases, hydrogen fluoride, brass, copper, lead, iron, steel, strong reducing agents.
Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, sulfur oxides (SOx), including sulfur oxide and sulfur dioxide.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:
CAS# 75-75-2: PB1140000
LD50/LC50:
CAS# 75-75-2:
Dermal, guinea pig: LD50 = >2 gm/kg;
Oral, rat: LD50 = 200 mg/kg;
.

LD50: ORAL: RAT: 200mg/kg
Carcinogenicity:
CAS# 75-75-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found
Teratogenicity: No information found
Reproductive Effects: No information found
Mutagenicity: No information found
Neurotoxicity: No information found
Other Studies:

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.
Environmental: Terrestrial Fate: Methanesulfonic Acid will have very high mobility in soil. Many bacterial types can degrade methanesulfonic acid. Vaporization may occur from dry soil, but not moist soil. Aquatic Fate: Expected to be non-volatile from water. Many bacterial types will degrade. Atmospheric Fate: exists predominantly in the vapor phase. It will degrade by reactions with photochemically produced hydroxyl radicals with an estimated half-life of 58 days. In the atmosphere it exists as smaller sized particals and may be removed via wet and dry deposition.
Physical: No information available.
Other: No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	ALKYL SULFONIC ACIDS, LIQUID	No information available.
Hazard Class:	8	
UN Number:	UN2586	
Packing Group:	III	

Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 75-75-2 is listed on the TSCA inventory.
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 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.
CERCLA Hazardous Substances and corresponding RQs
None of the chemicals in this material have an RQ.
SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.
SARA Codes
CAS # 75-75-2: immediate.
Section 313 No chemicals are reportable under Section 313.
Clean Air Act:
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.
Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.
OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.
STATE
CAS# 75-75-2 can be found on the following state right to know lists: New Jersey.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols:
C
Risk Phrases:
R 34 Causes burns.

Safety Phrases:

WGK (Water Danger/Protection)
CAS# 75-75-2: 2
Canada - DSL/NDSL
CAS# 75-75-2 is listed on Canada's DSL List.
Canada - WHMIS
This product has a WHMIS classification of E, D1B.
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
Canadian Ingredient Disclosure List

Section 16 - Additional Information

MSDS Creation Date: 8/21/2000
Revision #4 Date: 10/03/2005