

Material Safety Data Sheet

SECTION 1 PRODUCT IDENTIFICATION

FMES

Product Name: FMES
Product Number(s): 87701
Synonyms: FMES 70%

SECTION 2 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
FMES	71338-19-24	0 - 100 %weight
Fatty Acid Methyl Ester	627-91-8	<1%
Sodium sulfate	7757-82-6	<1%
Pure Water	7732-18-5	0 - 100 %weight

SECTION 3 HAZARDS IDENTIFICATION

IMMEDIATE HEALTH EFFECTS

EYES: Can cause irritation or reddening.

SKIN CONTACT: FMES is rapidly absorbed through the skin or mucous membranes and may produce smarting, redness or contact dermatitis. It has also produced garlic like breath, headache, sedation, diarrhea, and disturbances in color vision in some individuals after dermal contact. It may accelerate the skin absorption of other materials including toxics.

INGESTION: Based on animal data, large oral dosages can produce bloody urine, kidney damage, or liver damage. The estimated mean lethal single dose in an adult human male exceeds 1 quart.

INHALATION: Headache, nausea, irritation, dizziness. Gross overexposures, (more than 50,000 ppm) have produced chemical pneumonia and death in experimental animals.

SECTION 4 FIRST AID MEASURES

Eye: No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water. If heated material should splash into eyes, flush eyes immediately with fresh water for 15 minutes while holding the eyelids open. Remove contact lenses, if worn. Get immediate medical attention.

Skin: No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, apply a waterless hand cleaner, mineral oil, or petroleum jelly. Then wash with soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse. If the hot material gets on skin, quickly cool in water. See a doctor for extensive burns. Do not try to peel the solidified material from the skin, or use solvents or thinners to dissolve it. The use of vegetable oil or mineral oil is recommended for removal of this material from the skin.

Ingestion: No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

SECTION 5 HEALTH EFFECTS

CHRONIC HEALTH EFFECTS: Repeated skin exposure can result in allergic sensitization and scaling dermatitis. Dimethyl sulfoxide may accelerate the absorption of toxic materials through the skin. These materials may exhibit chronic health effects.

ROUTES OF ENTRY:

MOST COMMON: Skin and inhalation.

OTHER: Eye and ingestion.

EYES: Flush thoroughly with running water (including under the eyelids) for at least 15 minutes. If irritation persists after flushing, seek medical attention.

SKIN: Remove contaminated clothing promptly (launder before reuse). Wash contaminated skin. Seek medical attention if irritation persists.

INGESTION: Do not induce vomiting. Seek immediate medical attention.

INHALATION: Remove to fresh air. If breathing has stopped, provide artificial respiration. Keep the victim warm and seek medical attention.

SECTION 6 HANDLING AND STORAGE

Precautionary Measures: FMES typically stored, transported and used at temperatures between -15°C and 75°C.

ASPHALT EQUIPMENT. Observe manufacturer's guidelines on proper equipment use.

Do not get in eyes, on skin, or on clothing. Do not breathe vapor or fumes from heated material.

Smoking, eating and drinking, etc. should be prohibited when skin contact with the product or fume condensate is possible. Workers should clean hands and face before smoking, eating and drinking, etc.

Do not use solvents to clean hands and face. Use vegetable oils or mineral oil, followed by a thorough washing with soap and water. Avoid contact of heated material with eyes, skin, and clothing. Do not breathe vapor or fumes. Wash thoroughly after handling.

General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures.

Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

SECTION 7 PHYSICAL AND CHEMICAL PROPERTIES

Color: Light yellow

Physical State: Liquid

Odor: No odor

pH: 6-7(1% solution)

Vapor Pressure: No data available

Vapor Density (Air = 1): No data available

Boiling Point: 100 °C -120 °C

Solubility: Soluble in water.



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Specific Gravity: 1 - 1.08 @ 15.6 °C (60.1 °F) / 15.6 °C (60.1 °F)
Viscosity: No data available

SECTION 8 ACCIDENTAL RELEASE MEASURES

LAND SPILL: Wear skin and respiratory protection during cleanup. Contain spill. Keep out of sewers and drains.
WATER SPILL: Notify proper authorities.

SECTION 9 TOXICOLOGICAL INFORMATION

IMMEDIATE HEALTH EFFECTS

Eye Irritation: The eye irritation hazard is based on evaluation of data for similar materials or product components.

Skin Irritation: The skin irritation hazard is based on evaluation of data for similar materials or product components.

Skin Sensitization: The skin sensitization hazard is based on evaluation of data for similar materials or product components.

Acute Dermal Toxicity: The acute dermal toxicity hazard is based on evaluation of data for similar materials or product components.

Acute Oral Toxicity: The acute oral toxicity hazard is based on evaluation of data for similar materials or product components.

Acute Inhalation Toxicity: The acute inhalation toxicity hazard is based on evaluation of data for similar materials or product components.

SECTION 10 ECOLOGICAL INFORMATION

ECOTOXICITY

This material is not expected to be harmful to aquatic organisms. The ecotoxicity hazard is based on an evaluation of data for the components or a similar material.

ENVIRONMENTAL FATE

Ready Biodegradability: This material is not expected to be readily biodegradable. The biodegradability of this material is based on an evaluation of data for the components or a similar material.

SECTION 11 DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by international, country, or local laws and regulations.

SECTION 12 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Local exhaust ventilation is recommended.

PERSONAL PROTECTION: Use chemical impervious gloves, chemical goggles, wear apron to protect from possible splashing. Eye wash station and safety shower in work area.

SECTION 13 STABILITY AND REACTIVITY

Stability: Stable

Thermal Decomposition: 220 °C

SECTION 14 TRANSPORTATION INFORMATION



PROPER SHIPPING NAME: Not regulated.

HAZARD CLASS: NA
IDENTIFICATION NUMBER: NA
DOT Emergency Guide #: NA
Reportable Quantity (RQ): NA
International: NA

SECTION 15 REGULATORY INFORMATION

TSCA (Toxic Substance Control Act): Components of this product are listed on the TSCA Inventory.
CERCLA (Comprehensive Environmental Response, Compensation and Liability Act): Not listed.
SARA TITLE III (Superfund Amendments and Reauthorization Act): Not listed.
CALIFORNIA PROPOSITION 65: Not listed. Warning: As is the case with most
CLEAN WATER ACT: Contains no known priority pollutants at concentrations greater than 0.1%.

SECTION 16 OTHER INFORMATION

No data available

REVISION STATEMENT: This is a new Material Safety Data Sheet.

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ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
	CAS - Chemical Abstract Service Number
ACGIH - American Conference of Government Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	MSDS - Material Safety Data Sheet
CVX - Chevron	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.