SAFETY DATA SHEET

1. Identification

Product identifier	**MITC-FUME®**		
Other means of identification **SDS number**	30-UTL	**EPA Registration Number**	69850-1-75341
Recommended use	Wood preservative for utility poles		
Recommended restrictions	None known.		

Manufacturer/Importer/Supplier/Distributor information

Company name	Osmose Utilities Services, Inc.	
Address	635 Hwy 74 S Peachtree City, GA 30269 US	
Telephone	Phone Number:	770-632-6700
	Osmose Products Group:	716-319-3420
Website	www.osmoseutilities.com	
E-mail	products@osmose.com	
Contact person	Osmose Products Group	
Emergency phone number	CHEMTREC:	1-800-424-9300

2. Hazard(s) identification

Physical hazards	Not Classified.	
Health hazards	Acute toxicity, oral	Category 3
	Acute toxicity, dermal	Category 2
	Acute toxicity, inhalation	Category 2
	Skin corrosion/irritation	Category 1B
	Serious eye damage/eye irritation	Category 1
	Sensitization, skin	Category 1
	Specific target organ toxicity, single exposure	Category 3, respiratory tract

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Fatal if inhaled or absorbed through skin. Toxic if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation.

Precautionary statement

Prevention Avoid breathing dust/fume. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves and clothing. Wear eye protection.

Response

Get medical attention if you feel unwell. **IF SWALLOWED:** Drink promptly a large quantity of milk, egg whites, gelatin solution or a large quantity of water or aqueous sodium sulfate solution. Do not administer alcohol or castor oil. Do not induce vomiting. Rinse mouth. **IF ON SKIN:** Remove contaminated clothing and absorb remaining product from skin by means of cotton pads, paper towels, or similar. Wash contaminated skin with plenty of soap and water or a 5% sodium bicarbonate solution. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. **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. Continue rinsing.

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with local, regional, national and international regulations. Wood treated with MITC-FUME IS NOT a hazardous waste.

Hazard(s) not otherwise classified (HNOC)

None.

Supplemental information

Not applicable.

3. Composition/information on ingredients

Substances

Chemical name	CAS number	%
Methyl isothiocyanate	556-61-6	90 - 100

Composition comments

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact

Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Remove contents in stomach by gastric lavage and catharsis. Rise stomach, if possible (physician – possible mucosal damage may contra-indicate use of gastric lavage!), check function of organs and treat as appropriate for symptoms of poisoning.

Most important symptoms/effects, acute and delayed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Lachrymation (discharge of tears). Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. Rash.

Indication of immediate medical attention and special treatment needed

No data available.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Fire may produce irritating, corrosive and/or toxic gases. Containers may explode when heated.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Use water spray to cool unopened containers.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Burning material releases toxic nitrous oxide and sulfur dioxide gases. Product vapor forms explosive mixtures with air; prevent build-up of electrostatic charges, sparks, and open flame.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Immediately evacuate personnel to safe areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust and vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see Section 8 of the SDS.
Methods and materials for containment and cleaning up	Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Stop the flow of material, if this is without risk. Collect spillage. Large Spills: Wet down with cold water and dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.
Environmental precautions	Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Minimize dust generation and accumulation. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not taste or swallow. Avoid breathing dust or vapor. Do not get this material on clothing. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.
Conditions for safe storage, including any incompatibilities	Store locked up. Store in original tightly closed container. Store in a cool, well-ventilated place away from food and foodstuff. Store away from incompatible materials (see Section 10 of the SDS). Avoid exposure to heat and/or sunlight.

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles) and a face shield.
Skin protection	
Hand protection	Wear chemical-resistant gloves, rubber or neoprene (limited protection, replace frequently).
Other	Wear acid-resistant non-porous overalls or aprons.
Respiratory protection	Under normal use, there is no need for respiratory protection. If MITC-FUME is to be used in an enclosed area, a positive pressure supplied air respirator equipped with a full face piece should be used during any operation where there is potential for release of this product to workplace air.
General hygiene considerations	When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and Chemical Properties

Appearance	
Physical state	Solid.
Form	Solid. Solidified melt.
Color	Colorless to slightly yellow.
Odor	Pungent. Irritating odor.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	102.2 °F (39 °C)
Initial boiling point and boiling range	246.2 °F (119 °C) OECD Test Guideline 102
Flash Point	95.0 °F (35.0 °C)
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit – lower (%)	Not available.
Flammability limit – upper (%)	Not available.
Vapor pressure	19 mm Hg.
Vapor density	> 1 (air = 1).
Relative density	1.02 @ 20°C.
Solubility(ies)	
Solubility (water)	7.94 g/l @ 20°C / 68°F
Partition coefficient (n-octanol/water)	1.3 (Practically no potential to bioaccumulate).
Auto-ignition temperature	672.8 °F (356 °C).
Decomposition temperature	Not available.
Viscosity	0.79 mPa•s @ 20°C
Other Information	
Bulk Density	8.91 lb/gal
Molecular weight	73.11 g/mol
Surface tension	72.6 mN/m @ 20°C (OECD Test Guideline 115)

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid exposure to high temperatures or direct sunlight. Water.
Incompatible materials	Oxidizing material. Iron. Polyvinyl chloride (PVC). Rubber.
Hazardous decomposition products	Carbon oxysulfide, hydrogen sulfide and methylamine may be formed upon contact with hydrolyzing agents (e.g. water). Violent reactions and formation of sulfur dioxide occur upon reaction with oxidants.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Toxic if swallowed. Causes digestive tract burns.
Inhalation	Toxic by inhalation.
Skin contact	Causes severe skin burns. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity

Components	**Species**	**Test Results**
Methyl isothiocyanate (CAS 556-61-6)		
Acute		
Dermal		
LD50	Rabbit	174 mg/kg, OECD Test Guideline 402
Inhalation		
LC50	Rat	1.9 mg/l, 1 Hours, OECD Test Guideline 403 (vapor saturated atmosphere)
Oral		
LD50	Rat	67 mg/kg, OECD, Test Guideline 401

Skin corrosion/irritation	Causes severe skin burns.
Serious eye damage/eye irritation	Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization	Not classified.
Skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not classified.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Components		Species	Test Results
Methyl isothiocyanate (CAS 556-61-6)			
Aquatic			
Acute			
Algae	IC50	Algae	0.58 mg/l, 72 hr
Crustacea	EC50	Daphnia magna	0.76 ml/l, 48 hr
Fish	LC50	Rainbow trout (Oncorhynchus mykiss)	0.531 mg/l, 96 hr

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential The product is not expected to bioaccumulate.

Partition coefficient n-octanol / water (log Kow)

Methyl isothiocyanate (CAS 556-61-6) 1.3, (Practically no potential to bioaccumulate)

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local, regional, national and international regulations.

Pesticide disposal Wood treated with MITC-FUME IS NOT a hazardous waste.
Follow container label instructions for disposal of wastes generated during use in compliance with the EPA product label. If unused MITC-FUME is disposed of it may be considered a hazardous waste (as per RCRA) because of its ignitability. Disposal of such material should be conducted by an EPA permitted facility. Questions regarding disposal can be directed to EPA's RCRA Hotline at (800) 424-9346. Dispose of in accordance with local regulations.

Container disposal Do not reuse or refill these containers. Completely empty fiberboard box. Offer for recycling, if available, or dispose of in a sanitary landfill. Completely empty steel canister. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill or by other procedures allowed for by state and local authorities. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number UN2477
UN proper shipping name Methyl isothiocyanate

Transport hazard class(es)

Class 6.1(PGI, II, INHAL)
Subsidiary risk 3
Packing group I
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Special provisions 2, B9, B14, B32, T20, TP2, TP13, TP38, TP45
Packaging exceptions None
Packaging non bulk 227
Packaging bulk 244

* For US ground transportation, this product may be shipped using DOT Special Permit 11900.

IATA Forbidden.

IMDG

UN number	UN2477
UN proper shipping name	Methyl isothiocyanate
Transport hazard class(es)	
Class	6.1 (PGI, II)
Subsidiary risk	3
Packing group	I
Environmental hazards	
Marine pollutant	Yes
EmS	F-E, S-D
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories

Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value
Methyl isothiocyanate	556-61-6	500	500 lbs		

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Methyl isothiocyanate	556-61-6	90 - 100

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

FIFRA Information This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

Signal Word DANGER - POISON - SKULL AND CROSSBONES

Precautionary Statement Fatal if inhaled or absorbed through the skin. Corrosive. Causes irreversible eye damage and skin burns. May be fatal if swallowed.

US state regulations

US. New Jersey Worker and Community Right-to-Know Act

Methyl isothiocyanate (CAS 556-61-6)

US. Massachusetts RTK - Substance List

Methyl isothiocyanate (CAS 556-61-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Methyl isothiocyanate (CAS 556-61-6)

US. Rhode Island RTK

Methyl isothiocyanate (CAS 556-61-6)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 05-May-2015

Revision date 05-May-2015

Revision No. 01

HMIS Ratings		NFPA ratings	
Health:	3	**Health:**	3
Flammability:	3	**Flammability:**	3
Physical hazard:	1	**Physical hazard:**	1

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