

## SAFETY DATA SHEET

This SDS is prepared in accordance with OSHA 29 CFR 1910.1200



Section 1. Identification			
PRODUCT IDENTIFIER	<b>E9 METAL PRO (NSF Certified)</b>		Code Mixture
			CAS # Mixture
RECOMMENDED USE	SURFACE COATING and TREATMENT		
	For Industrial use only. Not recommended for Medical Device or Drug use.		
MANUFACTURER / SUPPLIER	E9 TREATMENTS 159 Enterprise Parkway, Boerne, TX - 78006 P: 1-888-301-2400 <a href="http://www.e9treatments.com">www.e9treatments.com</a>	In Case of Emergency (US/Canada) (International)	ChemTel 1-800-255-3924 +01-813-248-0585
Section 2. Information on Hazardous Ingredients			
HAZARD CLASSIFICATION	NOT CLASSIFIED AS HAZARDOUS ACCORDING TO OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200.		
LABEL ELEMENTS	SINGLE WORD	NOT APPLICABLE	
	SYMBOLS	NOT APPLICABLE	
	PICTOGRAMS	NOT APPLICABLE	
HAZARD NOT OTHERWISE CLASSIFIED	NONE		
PRECAUTIONARY STATEMENTS	Store in a well-ventilated place. Keep Cool. Dispose of contents/container in accordance with local/regional /national/international regulations.		
Section 3. Composition / Information on ingredients			
DESCRIPTION	LIQUID		
	INGREDIENT	C.A.S. NO.	% BY WT
	Fluoro Compound	Trade Secret*	0.01 - 0.2%
	METHYL NONAFLUOROBUTYL ETHER	163702-07-6	99.8-99.98%
	METHYL NONAFLUOROISOBUTYL ETHER	163702-08-7	99.8-99.98%
* The specific chemical identity and/or percentage of this material has been withheld as a trade secret			
Section 4. First Aid Measures			
INHALATION	Supply fresh air; consult doctor in case of complaints.		
SKIN CONTACT	Immediately wash with water and soap and rinse thoroughly. If symptoms develop, seek medical help.		
EYE CONTACT	Rinse opened eye for several minutes under running water. Remove contacts if easy to do. If symptoms persist, seek medical help.		
INGESTION	Do not induce vomiting; call for medical help immediately. Rinse mouth with water.		
MOST IMPORTANT SYMPTOMS AND EFFECTS	See Section 11.1 Information on Toxicological effects.		
INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT	No further relevant information available.		
Section 5. Fire Fighting Measures			
SUITABLE/UNSUITABLE EXTINGUISHING MEDIA	Non-combustible. Use fire extinguishing methods suitable to surrounding conditions. Foam. Fire-extinguishing powder. Carbon dioxide.		
SPECIFIC HAZARDS (IE HAZARDOUS COMBUSTION PRODUCTS)	Formation of toxic gases is possible during heating or in case of fire. Hydrogen fluoride (HF) Carbon monoxide Carbon dioxide		
SPECIAL PROTECTIVE ACTIONS FOR FIRE FIGHTERS	When fire fighting conditions are severe and total thermal decomposition of the product is possible, wear full protective clothing, including helmet, self contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.		
Section 6. Accidental Release Measures			
PERSON PRECAUTIONS, PPE	Ensure adequate ventilation. Wear protective equipment. Keep unprotected persons away. Keep away from ignition sources.		
ENVIRONMENTAL PRECAUTIONS	Do not allow to enter sewers/ surface or ground water. Prevent from spreading (e.g. by damming-in or oil barriers) Inform respective authorities in case of seepage into water course or sewage system.		
METHODS & MATERIALS OF CONTAINMENT & CLEANING	Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Clean up residue with an appropriate organic solvent. Seal the container. Send for recovery or disposal in suitable receptacles.		

## Section 7. Handling and Storage

### PRECAUTIONS FOR SAFE HANDLING

Ensure good ventilation/exhaustion at the workplace. Do not breathe thermal decomposition products. Avoid skin contact with hot material. For industrial or professional use only. Store work clothes separately from other clothing, food and tobacco products. Avoid release to the environment.

Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) No smoking: Smoking while using this product can result in contamination of the tobacco and/or smoke and lead to the formation of hazardous decomposition products.

Keep away from heat and direct sunlight.

### CONDITIONS FOR SAFE STORAGE

Store in cool, dry conditions. Keep container tightly sealed. Only use containers compatible with the product. Store only in unopened original receptacles.

Do not store together with oxidising and acidic materials as well as heavy metal compounds.

## Section 8. Exposure Controls/Personal Protection

COMPONENT	PEL/TWA/STEL	CONTROL PARAMETER	AGENCY	CAS
METHYL NONAFLUOROBUTYL ETHER	TWA	750 ppm	AIHA	163702-07-6
METHYL NONAFLUOROISOBUTYL ETHER	TWA	750 ppm	AIHA	163702-08-7

### VENTILATION /ENGINEERING CONTROLS

Provide appropriate local exhaust when product is heated. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

### SKIN PROTECTION

Wear protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Consider penetration times, rates of diffusion and the degradation of material when selecting gloves.

### MATERIAL OF GLOVES

Reinforced nitrile rubber, NBR

Suitable gloves not only depend on material, but also on manufacturing quality. Gloves should be checked prior to use for good manufacturing quality.

Penetration time of glove material The exact breakthrough time of the glove material has to be found out by the manufacturer of the protective glove and has to be observed.

### RESPIRATORY PROTECTION

Use suitable respiratory protective device in case of insufficient ventilation.

### THERMAL HAZARDS

Wear heat insulating gloves when handling hot material to prevent thermal burns.

### EYE PROTECTION

Wear safety glasses with side shields.

### CLOTHING

Use protective suit.

## Section 9. Physical and Chemical Properties

Physical State and Appearance	Colorless liquid
Odor	Ether-like
Odor threshold	Not determined
pH	Not applicable
Melting/Freezing Point	-135° C
Initial boiling point and boiling range	61° C
Flash point	None
Specific Gravity	1.5 [Ref Std: WATER=1]
Evaporation rate	49 [Ref Std: BUOAC=1]
Flammability (solid, gas)	None detected
Upper/lower flammability or explosive limits:	None detected
Vapor pressure	202 mmHg [@ 25 °C]
Vapor density	8.6 [Ref Std: AIR=1]
Relative Density	1.5 g/ml
Solubility (in H <sub>2</sub> O)	< 12ppm
Partition coefficient: n-octanol/water	3.9 [Details: 30 °C]
Auto-ignition Temperature	405 °C [Details: (ASTM E659-84)]
Decomposition temperature	Not Applicable
Viscosity	0.6 centipoise [@ 23 °C]
Percent Volatility	100%

**Section 10. Stability and Reactivity Data**

<b>INCOMPATIBILITY WITH VARIOUS SUBSTANCES</b>	Avoid strong acids and strong bases.
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>	At elevated temperatures: Carbon monoxide ; carbon dioxide ; hydrogen flouride ; Perfluoroisobutylene Perflourinated Acid Flourides. At extreme conditions of heat toxic vapor, Gas, Particulate may be released.

**Section 11. Toxicological Information**

COMPONENT	Test	Control Parameter
METHYL NONAFLUOROBUTYL ETHER	Oral Rat LD 50	> 5000 mg/kg
	Inhalation Rat LC50	> 100, 000 ppm 4H
METHYL NONAFLUOROISOBUTYL ETHER	Oral Rat LD 50	> 5000 mg/kg
	Inhalation Rat LC50	> 100, 000 ppm 4H

<b>INHALATION</b>	No health effects are expected.
<b>SKIN CONTACT</b>	Contact with the skin during product use is not expected to result in significant irritation.
<b>EYE CONTACT</b>	May cause temporary irritation on eyes with a burning feeling, tearing, or redness.
<b>INGESTION</b>	No known health effects.
<b>ACUTE EFFECT ON HUMANS</b>	No known health effects.
<b>CHRONIC EFFECT ON HUMANS</b>	No known health effects.

**Section 12. Ecological Information**

ECOTOXICITY	Test Organism	Test Type	Result
	LC50 Fathead Minnow, Pimephales promelas	96 hours Lethal Concentration 50%	> 7.9 mg/l
	IC50 Green algae, Selenastrum capricornutum	96 hours Inhibitory Concentration 50%	> 8.9 mg/l
	EC50 Water flea, Daphnia magna	48 hours Effect Concentration 50%	> 10 mg/l

**Section 13. Disposal Considerations**

<b>WASTE INFORMATION</b>	Send to an approved waste facility. All wastes must be handled in accordance with local, state and federal regulations. Do not allow product to reach sewage system or any water course.
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**Section 14. Transport Information**

	Not regulated per U.S. DOT, IATA or IMO.
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**Section 15. Other Regulatory Information and Pictograms**

<b>US FEDERAL REGULATIONS</b>	OSHA does not have a formal Permissible Exposure Limit (PEL) for the 7100. EPA Hazardous Waste Number (RCRA): Not regulated
<b>CHEMICAL INVENTORIES</b>	Not Determined

**Section 16. Other Information**

<b>NFPA Hazard Classification</b>	<b>Health: 0</b>	<b>Flammability: 0</b>	<b>Reactivity: 0</b>	<b>Special Hazards: None</b>
<p>Hazardous Material Identification System (HMIS®) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint and Coatings Association (NPCA).</p>				
<b>HMIS Hazard Classification</b>	<b>Health: 1</b>	<b>Flammability: 0</b>	<b>Reactivity: 0</b>	<b>Protection: X - See PPE section.</b>
<p>Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).</p>				

**Notice to Reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.