

# SAFETY DATA SHEET

This SDS is prepared in accordance with OSHA 29 CFR 1910.1200



## Section 1. Identification

<b>PRODUCT IDENTIFIER</b>	<b>PRO METAL TREATMENT</b>	Code	Mixture
		CAS #	Mixture
<b>RECOMMENDED USE</b>	SURFACE COATING PRODUCT		
	For Industrial use only. Not recommended for Medical Device or Drug use.		
<b>MANUFACTURER / SUPPLIER</b>	e9 TREATMENTS 159 Enterprise Parkway, Boerne, TX - 78006 P: 210-742-1051	<b>In Case of Emergency</b> (US/Canada) (International)	Chemtel 1-800-255-3924 +01-813-248-0585

## Section 2. Information on Hazardous Ingredients

### Classification of the substance or mixture

<b>ACUTE TOX, 4;H332</b>	Harmful if inhaled
<b>EYE DAM. 2A; H319</b>	Causes serious eye irritation.
<b>AQUATIC ACUTE. 3; H402</b>	Harmful to aquatic life.
<b>AQUATIC CHRONIC. 3; H412</b>	Harmful to aquatic life with long lasting effects

### Label Elements

	SINGLE WORD	<b>WARNING</b>	
	PICTOGRAM		

### Hazard Statement

H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H402 Harmful to aquatic life.  
H412 Harmful to aquatic life with long lasting effects.

### PRECAUTIONARY STATEMENTS

<b>PREVENTION</b>	P261 Avoid breathing dust, fume, gas, mist, vapors, spray. P264 Wash thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P280 Wear protective gloves, eye protection, face protection.
<b>RESPONSE</b>	P304+312 IF INHALED: Call a poison center or doctor or physician if you feel unwell. P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. P337+313 If eye irritation persists: Get medical advice or attention. P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.
<b>STORAGE</b>	Store in a well-ventilated place. Keep Cool.
<b>DISPOSAL</b>	P501 Dispose of contents or container in accordance with local and national regulations.

## Section 3. Composition / Information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal hazardous Substance regulations.

DESCRIPTION		LIQUID		
INGREDIENT		C.A.S. NO.	% BY WT	GHS CLASSIFICATION
1,2-Dichloroethylene		0000156-60-5	50 - 75	Flam. Liq. 2; H225 Acute Tox. 4; H332 Aquatic Chronic 3; H412
Butane, 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluoro-		0163702-05-4	5 - 10	Not Classified
Propane, 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoro-		0163702-06-5	5 - 10	Eye Irrit. 2;H319
Methyl nonafluorobutyl ether		0163702-07-6	5 - 10	Not Classified
Methyl nonafluoroisobutyl ether		0163702-08-7	5 - 10	Not Classified
Isopropyl Alcohol		0000067-63-0	1 - 5	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

\*PBT/vPvB - PBT-substance or vPvB-substance.

The full texts of the phrases are shown in Section 16.

<b>Section 4. First Aid Measures</b>	
<b>Description of first aid measures</b>	
<b>GENERAL</b>	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
<b>INHALATION</b>	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
<b>EYES</b>	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
<b>SKIN</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
<b>INGESTION</b>	If swallowed obtain immediate medical attention. Keep at rest. DO NOT induce vomiting.
<b>Most Important Symptoms and effects, both acute and delayed</b>	
<b>OVERVIEW</b>	<p>Treat symptomatically. Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.</p> <p>Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation, and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. Check section 2.2 (GHS Label Elements) for further details.</p>
<b>INHALATION</b>	Harmful if inhaled.
<b>EYES</b>	Causes serious eye irritation.
<b>Section 5. Fire Fighting Measures</b>	
<b>EXTINGUISHING MEDIA</b>	<p>Non-combustible. Use fire extinguishing methods suitable to surrounding conditions.</p> <p>Foam.</p> <p>Fire-extinguishing powder.</p> <p>Carbon dioxide.</p>
<b>SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE</b>	<p>Formation of toxic gases is possible during heating or in case of fire.</p> <p>Hydrogen fluoride (HF)</p> <p>Carbon monoxide</p> <p>Carbon dioxide</p> <p>Avoid breathing dust, fume, gas, mist, vapors, spray.</p>
<b>SPECIAL PROTECTIVE ACTIONS FOR FIRE FIGHTERS</b>	<p>As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full-face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.</p> <p>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.</p>
<b>Section 6. Accidental Release Measures</b>	
<b>PERSON PRECAUTIONS, PPE AND EMERGENCY PROCEDURES</b>	Put on appropriate personal protective equipment (see section 8).
<b>ENVIRONMENTAL PRECAUTIONS</b>	<p>Do not allow spills to enter sewers/ drains or waterways.</p> <p>Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.</p>
<b>METHODS &amp; MATERIALS OF CONTAINMENT &amp; CLEANING</b>	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.
<b>Section 7. Handling and Storage</b>	
<b>PRECAUTIONS FOR SAFE HANDLING</b>	<p>Handle containers carefully to prevent damage and spillage. 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.</p> <p>Avoid contact with oxidizing agents (e.g. 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.</p> <p>Keep away from heat and direct sunlight.</p> <p>Check Section 2.2 (GHS Label Elements) for further details - [prevention]</p>
<b>CONDITIONS FOR SAFE STORAGE</b>	<p>Store in cool, dry conditions. Keep container tightly sealed. Only use containers compatible with the product. Store only in unopened original receptacles.</p> <p>Do not store together with oxidizing and acidic materials as well as heavy metal compounds.</p>
<b>INCOMPATIBLE MATERIALS</b>	<p>Avoid strong acids and strong bases.</p> <p>Check section 2.2 (GHS Label Elements) for further details - [Storage]</p>

**Section 8. Exposure Controls/Personal Protection**

COMPONENT	CAS	SOURCE	VALUE
ISOPROPYL ALCOHOL	0000067-63-0	OSHA	TWA: 400 ppm (980 mg/m <sup>3</sup> ) STEL 500 ppm
		ACGIH	TWA: 200 ppm STEL: 400 ppm
		NIOSH	TWA: 400 ppm (980 mg/m <sup>3</sup> ) STEL: 500 ppm (1225 mg/m <sup>3</sup> )
1,2-DICHLOROETHYLENE	0000156-60-5	OSHA	No Established Limit
		ACGIH	TWA: 200 ppm
		NIOSH	No Established Limit
BUTANE, 1-ETHOXY-1,1,2,2,3,3,4,4,4-NONAFLUORO-	0163702-05-4	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
PROPANE, 2-(ETHOXYDIFLUOROMETHYL)-1,1,1,2,3,3,3-HEPTAFLUORO-	0163702-06-5	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
METHYL NONAFLUOROBUTYL ETHER	163702-07-6	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
METHYL NONAFLUOROISOBUTYL ETHER	163702-08-7	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

<b>RESPIRATORY</b>	If workers are exposed to concentrations above the exposure limit, they must use the appropriate, certified respirators.
<b>EYES</b>	Wear safety glasses with side shields to protect the eyes. An eye wash station is suggested as a good workplace practice.
<b>SKIN PROTECTION</b>	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.
<b>ENGINEERING CONTROLS</b>	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
<b>OTHER WORK PRACTICES</b>	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse. Check section 2.2 (GHS Label Elements) for further details.

**Section 9. Physical and Chemical Properties**

<b>Physical State and Appearance</b>	Colorless liquid
<b>Odor</b>	Ether-like
<b>Odor threshold</b>	Not Determined
<b>pH</b>	Not Measured
<b>Melting/Freezing Point</b>	-135 °C
<b>Initial boiling point and boiling range</b>	61° C
<b>Flash point</b>	Not Measured
<b>Evaporation rate</b>	49 [Ref Std: BUOAC=1]
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits:</b>	Not measured
<b>Vapor pressure</b>	202 mmHg [@ 25 °C]
<b>Vapor density</b>	8.6 [Ref Std: AIR=1]
<b>Relative Density</b>	1.5 g/ml
<b>Solubility (in H<sub>2</sub>O)</b>	< 12ppm
<b>Partition coefficient: n-octanol/water</b>	Not Measured
<b>Auto-ignition Temperature</b>	405 °C [Details: (ASTM E659-84)]
<b>Decomposition temperature</b>	Not Measured
<b>Viscosity</b>	0.6 centipoise [@ 23 °C]
<b>Partial coeff: n-octanol/water</b>	3.9 [Details: 30C]
<b>Percent Volatility</b>	100%

**Section 10. Stability and Reactivity Data**

<b>REACTIVITY</b>	Hazardous Polymerization will not occur.
<b>CHEMICAL STABILITY</b>	Stable under normal circumstances
<b>POSSIBILITY OF HAZARDOUS REACTIONS</b>	No data available
<b>CONDITIONS TO AVOID</b>	No data available
<b>INCOMPATIBLE MATERIALS</b>	Avoid strong acids and strong bases
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>	At elevated temperatures: Carbon monoxide ; carbon dioxide ; hydrogen fluoride At extreme conditions of heat toxic vapor, Gas, Particulate may be released.

**Section 11. Toxicological Information**

**ACUTE TOXICITY** Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

COMPONENT	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
1,2-DICHLOROETHYLENE	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
BUTANE, 1-ETHOXY-1,1,2,2,3,3,4,4,4-NONAFLUORO-	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
PROPANE, 2-(ETHOXYDIFLUOROMETHYL)-1,1,1,2,3,3,3-HEPTAFLUORO-	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
METHYL NONAFLUOROBUTYL ETHER	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
METHYL NONAFLUOROISOBUTYL ETHER	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
Isopropyl Alcohol	5,840.00 Rat Category: NA	16,400.00, Rabbit Category: NA	72.60, Rat Category: NA	No Data Available	No Data Available

**CARCINOGEN DATA**

Component	CAS No.	Source	Value
Isopropyl Alcohol	0000067-63-0	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
		ACGIH	A4
1,2-Dichloroethylene	0000156-60-5	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
Butane, 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluoro-	0163702-05-4	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
Propane, 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoro-	0163702-06-5	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
Methyl nonafluorobutyl ether	0163702-07-6	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
Methyl nonafluoroisobutyl ether	0163702-08-7	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	4	Harmful if inhaled.
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	2A	Causes serious eye irritation.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

**Section 12. Ecological Information**

<b>TOXICITY</b>	Harmful to aquatic life Harmful to aquatic life with long lasting effects Harmful to aquatic life
-----------------	---

**AQUATIC ECOTOXICITY**

Ingredient	96 hr. LC50 fish, mg/L	48 hr. EC50 crustacea, mg/L	ErC50 algae, mg/L
1,2-Dichloroethylene - (156-60-5)	Not Available	Not Available	Not Available
Butane, 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluoro- (163702-05-4)	Not Available	Not Available	Not Available
Propane, 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoro- (163702-06-5)	Not Available	Not Available	Not Available
Methyl nonafluorobutyl ether - (163702-07-6)	Not Available	Not Available	Not Available
Methyl nonafluoroisobutyl ether - (163702-08-7)	Not Available	Not Available	Not Available
Isopropyl Alcohol - (67-63-0)	10,000.00, Pimephales promelas	Not Available	Not Available

<b>PERSISTENCE AND DEGRADABILITY</b>	There is no data available on the preparation itself.
--------------------------------------	---

<b>BIOACCUMULATIVE POTENTIAL</b>	Not Measured
----------------------------------	--------------

<b>MOBILITY IN SOIL</b>	No data available
-------------------------	-------------------

<b>RESULTS OF PBT AND vPvB ASSESSMENT</b>	This product contains no PBT/vPvB chemicals
---	---

<b>OTHER ADVERSE EFFECTS</b>	no data available
------------------------------	-------------------

**Section 13. Disposal Considerations**

<b>WASTE TREATMENT METHOD</b>	Observe all federal, state and local regulations when disposing of this substance. Do not allow product to reach sewage system or any water course.
-------------------------------	--

**Section 14. Transport Information**

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
<b>UN NUMBER</b>	Not Regulated	Not Regulated	Not Regulated
<b>UN PROPER SHIPPING NAME</b>	Not Regulated	Not Regulated	Not Regulated
<b>TRANSPORT HAZARD CLASS(ES)</b>	DOT Hazard Class: Not Applicable	IMDG: Not Applicable	Air Class: Not Applicable
	Sub Class: Not Applicable	Sub Class: Not Applicable	Sub Class: Not Applicable
<b>PACKING GROUP</b>	Not Applicable	Not Applicable	Not Applicable

<b>ENVIRONMENTAL HAZARDS</b>	IMDG: Marine Pollutant: No
------------------------------	----------------------------

<b>SPECIAL PRECAUTIONS FOR USER</b>	Not Applicable
-------------------------------------	----------------

**Section 15. Other Regulatory Information**

<b>REGULAROTY OVERVIEW</b>	The regulatory data in Section 13 is no intended to be all-inclusive, only selected regulation are represented.
----------------------------	---

<b>TOXIC SUBSTANCE CONTROL ACT (TSCA)</b>	All components of this material are either listed or exempt from listing on the TSCA Inventory.
---	---

<b>EPCRA 302 EXTREMELY HAZARDOUS</b>	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
--------------------------------------	--

<b>EPCRA 313 TOXIC CHEMICALS</b>	Isopropyl Alcohol
----------------------------------	-------------------

<b>PROP 65 - CARCINOGENS(&gt;0.0%)</b>	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
--	--

<b>PROP 65 - DEVELOPMENTAL TOXINS(&gt;0.0%)</b>	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
---	--

<b>PROP 65 - FEMALE REPRO TOXINS(&gt;0.0%)</b>	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
--	--

<b>PROP 65 - MALE REPRO TOXINS(&gt;0.0%)</b>	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
--	--

<b>PROP 65 - LABEL WARNING</b>	This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
--------------------------------	---

**Section 16. Other Information**

<b>REVISION DATE</b>	5/13/2022
----------------------	-----------

	The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We or any of our subsidiaries accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders. Final determination of suitability of any material is the sole responsibility of the user.
--	--

<b>THE FULL TEXT OF THE PHRASES APPEARING IN SECTION 3 IS:</b>	H225 Highly flammable liquid and vapor H319 Causes serious eye irritation H332 Harmful if inhaled H336 May cause drowsiness and dizziness H412 Harmful to aquatic life with long lasting effects
--	--