



## Halocarbon Mechanical Seal Barrier Fluids

### SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

#### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**Product identifier**

Chemical Name Polychlorotrifluoroethylene  
CAS No. 9002-83-9  
Trade Name Halocarbon Mechanical Seal Barrier Fluids, MSHV04n, MSHV04i, MSHV06n, MSHV06i, MSLV27n, MSLV27i, MSLV56n, MSLV56i, MSXTn, and MSXTi Halocarbon PCTFE Oils.  
Product Code None

**Relevant identified uses of the substance or mixture and uses advised against**

Identified Use(s) Lubricating Oils  
Uses Advised Against Not available

**Identity of manufacturer/importer and other suppliers**

Company Identification Halocarbon, LLC  
6525 The Corners Parkway; Suite 200  
Peachtree Corners, GA 30092  
Telephone (470) 419-6363  
E-Mail (competent person) [sds@halocarbon.com](mailto:sds@halocarbon.com)

**Emergency telephone number**

Emergency Phone No. CHEMTREC 24 hr. 1-800-424-9300 / 1 (703) 527-3887 (Collect calls accepted)

#### SECTION 2: HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

OSHA HCS (29 CFR 1910.1200) Not classified as dangerous for supply/use.

**Label elements**

Hazard Symbol None  
Hazard Statement(s) None  
Precautionary Statement(s) IF SWALLOWED: Rinse mouth. Treat symptomatically.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation develops and persists, get medical attention.  
IF ON SKIN: Wash with plenty of soap and water. If irritation (redness, rash, blistering) develops, get medical attention.  
Other hazards Keep out of reach of children.  
None

#### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	% wt.	CAS No.
Polychlorotrifluoroethylene	99-100	9002-83-9

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### SECTION 4: FIRST AID MEASURES



#### Description of first aid measures

Inhalation	Not normally required. Move person to fresh air. If breathing is laboured, administer oxygen. If symptoms develop, obtain medical attention.
Skin Contact	Wash affected skin with soap and water. If irritation (redness, rash, blistering) develops, get medical attention.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation develops and persists, get medical attention.
Ingestion	Rinse mouth. Treat symptomatically.
<b>Most important symptoms and effects, both acute and delayed</b>	None known.
<b>Indication of any immediate medical attention and special treatment needed</b>	None known.

### SECTION 5: FIRE-FIGHTING MEASURES

#### Extinguishing Media

-Suitable Extinguishing Media	Extinguish with water spray, dry chemical, sand or carbon dioxide.
-Unsuitable Extinguishing Media	None anticipated.

#### Special hazards arising from the substance or mixture

The decomposition to toxic, non-sludge forming volatile compounds occurs rapidly at 325 °C, noticeably at 300 °C and in lesser amounts at lower temperatures. Therefore, the maximum safe operating temperature recommended is 200 °C and maximum short term temperature recommended is 260 °C in scrupulously clean systems.

#### Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

Wear protective gloves/eye protection.

#### Environmental precautions

Avoid run off to waterways and sewers.

#### Methods and material for containment and cleaning up

Cover spills with inert absorbent material. Transfer to a container for disposal or recovery.

#### Reference to other sections

See Section: 8

#### Additional Information

None

### SECTION 7: HANDLING AND STORAGE

#### Precautions for safe handling

Avoid contact with skin and eyes.

#### Hygiene Measures

Wash hands and exposed skin thoroughly after handling.

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**Environmental Exposure Controls**

Avoid release to the environment.

**Conditions for safe storage, including any incompatibilities**

-Storage temperature

Store at room temperature.

-Incompatible materials

Strong oxidising agents. Reacts with active metals like Sodium and Potassium, Amines (including additives), liquid Fluorine and liquid Chlorine Trifluoride. Caution should be used with Aluminum and Magnesium under conditions of large shear forces such as those found in threaded connections.

**Specific end use(s)**

Lubricating Oils

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational Exposure Limits**

SUBSTANCE.	CAS No.	(8hr TWA)		STEL		Note:
		PEL (OSHA)	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	
None	-----	-----	-----	-----	-----	-----

**Recommended monitoring method**

None known.

**Exposure controls**
**Appropriate engineering controls**

Ensure adequate ventilation.

**Personal protection equipment**

Eye/face protection

Wear protective eyewear (goggles, face shield, or safety glasses).



Skin protection (Hand protection/ Other)

Wear suitable gloves (Nitrile rubber).



Respiratory protection

Normally no personal respiratory protection is necessary.


**Environmental Exposure Controls**

Disposal should be in accordance with local, state or national legislation.

**Additional Information**

None

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

Appearance

Liquid

Color.

Water White

Odor

Not available

Odor Threshold (ppm)

Not available

## Halocarbon Mechanical Seal Barrier Fluids

pH (Value)	Neutral
Melting Point (°C) / Freezing Point (°C)	Not available
Boiling point/boiling range (°C):	≥ 133 (≥ 271 °F)
Flash Point (°C)	None
Evaporation Rate	Not available
Flammability (solid, gas)	Not available
Explosive Limit Ranges	Not available
Vapour pressure (Pascal)	Not available
Vapour Density (Air=1)	Not available
Density (g/ml)	1.7 to 2.0 (14.5 to 16.8 lbs/gal)
Solubility (Water)	Insoluble
Solubility (Other)	Negligible
Partition Coefficient (n-Octanol/water)	Not available
Auto Ignition Point (°C)	Not available
Decomposition Temperature (°C)	Rapidly at 325 °C, noticeable at 300 °C, safe operating temperature is 200° C and maximum short term temperature is 260 °C in scrupulously clean systems
Kinematic Viscosity (cSt)	0.7 to 820 @ 40 °C
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
<b>Other information</b>	Not available

### SECTION 10: STABILITY AND REACTIVITY

<b>Reactivity</b>	Not available
<b>Chemical stability</b>	Considered stable under normal conditions.
<b>Possibility of hazardous reactions</b>	None known.
<b>Conditions to avoid:</b>	Incompatible materials
<b>Incompatible materials</b>	Reacts with active metals like Sodium and Potassium, Amines (including additives), liquid Fluorine and liquid Chlorine Trifluoride. Caution should be used with Aluminum and Magnesium under conditions of large shear forces such as those found in threaded connections.
<b>Hazardous decomposition product(s)</b>	The decomposition to toxic, non-sludge forming volatile compounds occurs rapidly at 325 °C, noticeably at 300 °C and in lesser amounts at lower temperatures. Therefore, the maximum safe operating temperature recommended is 200 °C and maximum short term temperature recommended is 260 °C in scrupulously clean systems.

### SECTION 11: TOXICOLOGICAL INFORMATION

**Exposure routes:** Inhalation, Skin Contact, Eye Contact

<b>Acute toxicity</b>	Oral: LD50 >15.9 g/kg-bw Dermal: LD50 >5 g/kg-bw
<b>Irritation/Corrosivity</b>	Not to be expected
<b>Sensitization</b>	It is not a skin sensitizer.
<b>Repeated dose toxicity</b>	Not to be expected
<b>Carcinogenicity</b>	No data. It is unlikely to present a carcinogenic hazard to man.

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NTP	IARC	ACGIH	OSHA	NIOSH
No.	No.	No.	No.	No.

<b>Mutagenicity</b>	There is no evidence of mutagenic potential.
<b>Reproductive toxicity</b>	Not to be expected

### SECTION 12: ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	
Acute toxicity (estimated / calculated)	LC50(96 hour): >100 mg/l (fish) EC50(48 hour): >100 mg/l (Daphnia magna) EC50 (72 hour): >100 mg/l (algae)
Long Term Toxicity	Not to be expected
<b>Persistence and degradability</b>	Persistent
<b>Bioaccumulative potential</b>	The substance has low potential for bioaccumulation.
<b>Mobility in soil</b>	No data.
<b>Results of PBT and vPvB assessment</b>	Not classified as PBT or vPvB.
<b>Other adverse effects</b>	None known.

### SECTION 13: DISPOSAL CONSIDERATIONS

<b>Waste treatment methods</b>	The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions, any by-products and containers should be in accordance with local, state, and national regulation, at an approved waste-handling facility. Do not release into drains, sewers, soil, or any body of water. Consult an accredited waste disposal contractor or the local authority for advice.
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### SECTION 14: TRANSPORT INFORMATION

	<u>Land transport</u> <u>(U.S. DOT)</u>	<u>Sea transport</u> <u>(IMDG)</u>	<u>Air transport</u> <u>(ICAO/IATA)</u>
<b>UN number</b>			
<b>Proper Shipping Name</b>			
<b>Transport hazard class(es)</b>			
<b>Packing group</b>			
<b>Environmental hazards</b>			
<b>Special precautions for user</b>			
<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:</b> Not applicable			

### SECTION 15: REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture:**

**TSCA (Toxic Substance Control Act) - Inventory Status:** All substances listed and active.

**Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):**

Chemical Name	CAS No.	Typical %wt.	RQ (Pounds)
None	----	----	----



## Halocarbon Mechanical Seal Barrier Fluids

SARA 311/312 - Hazard Categories: See SECTION 2 - HAZARDS IDENTIFICATION

SARA 313 - Toxic Chemicals (40 CFR 372):

Chemical Name	CAS No.	Typical %wt.
None	----	----

SARA 302 - Extremely Hazardous Substances(40 CFR 355):

Chemical Name	CAS No.	Typical %wt.	TPQ (pounds)
None	----	----	----

California Proposition 65 List:

Chemical Name	CAS No.	Type of Toxicity
None	----	----

### SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 5, 7, 13.

Date of preparation: January 14, 2020

Revision date: March 6, 2023

Additional Information: None

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