



Halovac 60, 100, 125, 190 Oils

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 Halovac 60, 100, 125, 190 Oils, 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

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.
Keep out of reach of children.

Other hazards

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.
Most important symptoms and effects, both acute and delayed	None known.
Indication of any immediate medical attention and special treatment needed	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

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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.
Other information	Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Not available
Chemical stability	Considered stable under normal conditions.
Possibility of hazardous reactions	None known.
Conditions to avoid:	Incompatible materials
Incompatible materials	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.
Hazardous decomposition product(s)	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

Acute toxicity	Oral: LD50 >15.9 g/kg-bw Dermal: LD50 >5 g/kg-bw
Irritation/Corrosivity	Not to be expected
Sensitization	It is not a skin sensitizer.
Repeated dose toxicity	Not to be expected
Carcinogenicity	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.

Mutagenicity	There is no evidence of mutagenic potential.
Reproductive toxicity	Not to be expected

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

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)
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Long Term Toxicity	Not to be expected
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Persistence and degradability

Persistent

Bioaccumulative potential

The substance has low potential for bioaccumulation.

Mobility in soil

No data.

Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

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.

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>
UN number			
Proper Shipping Name			
Transport hazard class(es)			Not classified as dangerous for transport.
Packing group			
Environmental hazards			
Special precautions for user			

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: 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	----	----	----

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



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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.

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Additional Information: None

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