



## MATERIAL SAFETY DATA SHEET

IDENTITY: HALOCARBON WAXES (40, 600, 800, 1000, 1200, 1500 & 2300)

## SECTION I: MANUFACTURER

HALOCARBON PRODUCTS CORPORATION      Emergency Number:                    (803) 278 3504  
 P.O. Box 661                                    Customer Service & Sales:    (201) 262 8899  
 River Edge, NJ 07661

Prepared by: Dr. Lee G. Sprague

## SECTION II: CHEMICAL IDENTITY

Components	CAS No.	OSHA PEL	ACGIH TLV	Other Limits
Polychlorotrifluoroethylene	9002-83-9	None	None	None

## OSHA HAZARD RATING:

This product contains the following toxic chemical(s) subject to Section 313 Title III reporting requirements (40 CFR Part 372).

None

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point : Decomposes >260 C      Vapor Pressure: Less than 0.1 mm Hg  
 Melting Point : N/A                            Vapor Density(Air=1): N/A  
 Specific Gravity(H<sub>2</sub>O=1): ca 2                Solubility in Water : Negligible

Appearance and Odor: Colorless, opaque wax.

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point/Method: None                    Autoignition Temp: Not determined  
 Flammability Limits in Air - LEL: N/A      UEL: N/A

Extinguishing Media: Non-flammable. Use agent suitable for surrounding fire.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus if there is danger of leakage in fire.

Unusual Fire and Explosion Hazards: Thermal decomposition products are acidic and toxic.

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 SECTION V - REACTIVITY DATA

Unstable [ ] Conditions to Avoid: N/A  
 Stable [X]

Incompatibility (Materials to Avoid): Aluminum threaded connections where galling and seizure may initiate reaction. Reacts with metals like sodium and potassium, amines, liquid fluorine and liquid chlorine trifluoride.

Hazardous Decomposition or By-products: The decomposition to toxic, non-sludge forming volatiles occurs rapidly at 325C, noticeably at 300C and in lesser amounts at lower temperatures. Therefore, the maximum safe operating temperature recommended is 200C and maximum short-term temperature recommended is 260C in scrupulously clean systems.

Hazardous Polymerization [ ] May Occur [X] Will Not Occur  
 Conditions To Avoid: N/A

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 SECTION VI - HEALTH HAZARD DATA

A related oil (Halocarbon 27) caused no deaths in rats dosed daily for 21 days with 2.5 g/kg orally. Symptoms attributed to fluoride poisoning by metabolism in the liver were noted. Enlargement of the liver and kidneys in the treated animals support this conclusion.

Extensive studies have been conducted on halocarbon oils similar to the ones found in this product. Based on all the available data in three species of animals, limited exposure to this product should not be harmful to any portion of the human anatomy. Studies conducted by the Air Force have demonstrated liver toxicity in rodents but not in primates. The observed liver toxicity is believed to be specific for rodents and not relevant to humans. Halocarbon oils are not irritating to the skin but simple skin protection should be used to prevent repeated exposure and the possibility of sensitization. All mutagenic studies were negative.

Since the potential for human toxicity cannot be ruled out proper work practices should be employed.

Primary routes of entry: [ ] Inhalation [X] Skin [ ] Eyes [ ] Oral

Acute Effects of Overexposure: From the animal studies, signs of fluoride poisoning may be expected. These include nausea, shortness of breath and loss of appetite.

Chronic Effects of overexposure: Unknown

Carcinogenicity listing: [ No ] NTP [ No ] IARC [ No ] OSHA  
 [ No ] Other:

## First Aid

Inhalation: N/A  
 Skin: Wash with soap and water. No skin effects expected.  
 Eye: Flush eyes with water for at least 15 minutes.  
 Oral: Dilute by drinking large quantities of water. If vomiting occurs administer more water.

Medical Conditions Generally Aggravated by Exposure: None known.

Other Health Hazards: None known.

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SECTION VII - PROTECTION INFORMATION

Respiratory: N/A

Ventilation: N/A

Eye and Face: Safety glasses

Gloves: Impervious gloves

Other equipment: None normally required.

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SECTION VIII - SPILL, LEAK AND DISPOSAL PROCEDURES

Spill, Leak, or Release: Spills may be wiped up with absorbent material and stored in closed container for disposal.

Waste Disposal: May be incinerated by licensed waste disposal company. Observe all federal, state and local regulations.

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SECTION IX - OTHER INFORMATION

1. Hazardous Materials/Dangerous Goods Shipping Regulations

U.S. (49 CFR): Proper Shipping Name: Non Hazardous Material

IATA: Proper Shipping Name: Non-Dangerous Goods

IMDG: Proper Shipping Name: Non-Dangerous Goods

2. Other Information: HMIS Labeling: H 1; F 0; R 0; P B

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REVISED: May 14, 2003