



# SDS – SAFETY DATA SHEET

## 1. IDENTIFICATION

**Product Identifier:** WPS-HAL-010 HALOCARBON POLYMER

Product Numbers: 25-10M, 25-10MS, 25-20M, 25-20MS, X90-10M, X90-10MS, MT-31

**Synonyms:** POLYCHLOROTRIFLUOROETHYLENE (9002-83-9)

**Chemical Formula:** CF<sub>2</sub>CFCl

**Recommended Use of the Chemical:** Lubricant

**Uses Advised Against:** Reacts with active metals like Sodium and Potassium, Amines (including additives), liquid Fluorine and liquid Chlorine Trifluoride.

**Manufacturer / Supplier:** HALOCARBON PRODUCTS CORPORATION

**Address:** 1100 Dittman Court, North; Augusta, SC 29841; USA

**Website:** www.halocarbon.com

**Email:** sds@halocarbon.com

**Phone:** (803) 278-3504

**Emergency CHEMTREC Phone:** (800) 424-9300 United States / 001-703-527-3887 International and Maritime

## 2. HAZARD(S) IDENTIFICATION

**Classification of the Substance or Mixture:** Not classified

**Risk Phrases:** None

**Label Elements:**

**Signal Word:** None

**Pictogram:** None

**Hazard Statements:** None

**Precautionary Statements:** None

**Other Hazards:**

**Substance Meets the Criteria for PBT According to Regulation (EC) No. 1907/2006 Annex XIII:**

PBT: Not applicable

**Substance Meets the Criteria for vPvB According to Regulation (EC) No. 1907/2006 Annex XIII:**

vPvB: Not applicable

**Other Hazards Which Do Not Result in Classification:** Not available

## 3. COMPOSITION INFORMATION / INGREDIENTS

| Ingredient                  | CAS Number | EC Number      | Percent |
|-----------------------------|------------|----------------|---------|
| Polychlorotrifluoroethylene | 9002-83-9  | Not applicable | 99-100% |

No ingredients are hazardous according to OSHA criteria.

No components need to be disclosed according to the applicable regulations.

## 4. FIRST-AID MEASURES

### Description of First Aid Measures:

**Inhalation:** Not an expected route of exposure. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give Oxygen. Seek medical help.

**Ingestion:** Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Rinse mouth with water. Seek medical attention.

**Skin Contact:** Wash off with soap and plenty of water.

**Eye Contact:** Flush eyes immediately with water for at least 15 minutes. Seek medical help.

### Most Important Symptoms and Effects, Both Acute and Delayed:

#### Potential Acute Health Effects:

**Inhalation:** None known

**Ingestion:** None known

**Skin Contact:** None known

**Eye Contact:** None known

#### Over-exposure Signs / Symptoms:

**Inhalation:** None known with respect to humans

**Ingestion:** None known with respect to humans

**Skin Contact:** None known with respect to humans

**Eye Contact:** None known with respect to humans

## 5. FIRE-FIGHTING MEASURES

### Extinguishing Media:

**Suitable Extinguishing Media:** Use water spray, dry chemical, Carbon Dioxide, or foam.

**Unsuitable Extinguishing Media:** No information available

### Special Hazards Arising From the Substance or Mixture:

**Hazards From the Substance or Mixture:** No information available

**Hazardous Thermal Decomposition Products:** Thermal decomposition products are toxic and corrosive. See Section 10.

### Advice for Fire-Fighters:

**Special Precautions for Fire-Fighters:** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special Protective Equipment for Fire-Fighters:** Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures:** Avoid breathing vapors, mist or gas. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contaminated surfaces will be extremely slippery.

**Environmental Precautions:** Prevent further leakage or spillage if it is safe to do so. Do not flush into surface water or sanitary sewer system. Prevent product from entering drains.

**Methods and Materials for Containment and Cleaning Up:** Spills may be picked up with absorbent material (such as sand, silica gel, acid binder, universal binder, sawdust) and held in covered container for disposal.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling:** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

**Conditions for Safe Storage, Including Any Incompatibilities:** Protect against physical damage. Keep container tightly closed in a dry and well-ventilated place. Keep out of reach of children.

**Specific End Uses:** Lubricant

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Airborne Exposure Limits:** No OSHA or ACGIH exposure limits have been established. Safe work practices should always be followed.

**Ventilation System:** Adequate general ventilation plus local exhaust at points of emission. Since the potential for human toxicity cannot be ruled out, proper ventilation and work practices should be employed.

**Personal Respirators (NIOSH Approved):** Not expected to require personal respirator usage. If the exposure limit is exceeded and engineering controls are not feasible, a half face-piece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten (10) times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full face-piece particulate respirator (NIOSH type N100 filters) may be worn up to fifty (50) times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerin, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full face-piece positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in Oxygen-deficient atmospheres.

**Skin Protection:** Wear impervious gloves, and protective clothing.

**Eye Protection:** Use safety glasses with side shields. Maintain eye wash fountain and quick-drench facilities in work area.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Clear, colorless solid paste

**Odor:** None

**Odor Threshold:** Not determined

**pH:** Approximately neutral

**Melting Point:** No data available

**Boiling Point / Boiling Range:** > 200C (392F)

**Flash Point:** None

**Evaporation Rate (BuAC=1):** No data available

**Flammability:** No data available

**Upper / Lower Flammability or Explosive Limits:** No data available

**Vapor Pressure (mm Hg):** < 0.1mm Hg

**Vapor Density (Air=1):** No data available

**Relative Density:** 1.9 @ 38C (100.4F)

**Solubility:** Negligible

**Partition Coefficient: n-octanol / water:** No data available

**Auto-ignition Temperature:** No data available

**Decomposition Temperature:** Decomposition occurs at temperatures above 200C (392F)

**Viscosity:** No data available

**Explosive Properties:** Not determined  
**Oxidizing Properties:** Not determined  
**Other Information:** No specific data

## 10. STABILITY AND REACTIVITY

**Reactivity:** No data available

**Chemical Stability:** Stable under recommended storage conditions

**Possibility of Hazardous Reactions:** Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to Avoid:** Incompatibles, excessive heat

**Incompatible Materials:** Reacts with active metals like Sodium and Potassium, Amines (including additives), liquid Fluorine and liquid Chlorine Trifluoride

**Hazardous Decomposition Products:** Carbon Monoxide (CO), Carbon Dioxide (CO<sub>2</sub>), Hydrocarbons, Hydrogen Chloride, Hydrogen Fluoride

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** Oral LD<sub>50</sub> (rat) > 9200 mg/kg

### Potential Health Effects:

**Inhalation:** No data available

**Ingestion:** No specific data available; low order of toxicity based on components

**Skin Contact:** No data available

**Eye Contact:** Contact with eyes may cause irritation

**Chronic Exposure:** No known effects

**Aggravation of Pre-existing Conditions:** No known effects

**Specific Target Organ Toxicity - Single Exposure (Globally Harmonized System):** No data available

**Specific Target Organ Toxicity - Repeated Exposure (Globally Harmonized System):** No data available

**Germ Cell Mutagenicity:** No known effects

**Reproductive Toxicity:** No known effects

**Aspiration Hazard:** No known effects

**Numerical Measures of Toxicity:** Cancer Lists: NTP Carcinogen

| Ingredient                              | Known | Anticipated | IARC Category |
|---|-------|-------------|---------------|
| Polychlorotrifluoroethylene (9002-83-9) | No    | No          | None          |

**Acute Toxicity:** These products contain a complex mixture of polymers of Chlorotrifluoroethylene (CTFE) which will vary from batch to batch. From animal studies, signs of fluoride poisoning may be expected. These include nausea, shortness of breath and loss of appetite.

Extensive studies have been conducted on lighter, more volatile Halocarbon oils. Based on all the available data in three species of animals, limited exposure to Halocarbon oil 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. All mutagenicity studies were negative.

Halocarbon oils are not irritating to skin but skin protection should be used to prevent repeated exposure and the possibility of sensitization.

In the absence of chronic toxicity data on these products, exposure to these products and their vapors should be avoided since the potential for human toxicity cannot be ruled out.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

**Persistence and Degradability:** No data available

**Bioaccumulative Potential:** Does not bioaccumulate

**Mobility in Soil:** No data available

**Results of PBT and vPvB assessment:** PBT / vPvB assessment not available as chemical safety assessment not required / not conducted.

**Other adverse effects:** No data available

## 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods:** Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. TRANSPORT INFORMATION

**Land Transport ADR/RID and GGVS/GGVE (Cross Border / Domestic):** Not regulated

**Maritime Transport IMDG/GGVSea:** Not regulated

**Air Transport ICAO-TI and IATA-DGR:** Not regulated

**Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable

**Special Precautions for User:** No additional information

## 15. REGULATORY INFORMATION

### Chemical Inventory Status – Part 1

| Ingredient                              | TSCA | EC  | Japan | Australia |
|---|------|-----|-------|-----------|
| Polychlorotrifluoroethylene (9002-83-9) | Yes  | Yes | Yes   | Yes       |

### Chemical Inventory Status – Part 2

| Ingredient                              | Korea | Canada |      | Phil. |
|---|-------|--------|------|-------|
|   |       | DSL    | NDSL |       |
| Polychlorotrifluoroethylene (9002-83-9) | Yes   | Yes    | No   | Yes   |

**Federal, State & International Regulations - Part 1**

| Ingredient                              | SARA 302 |     | SARA 313      |       |
|---|----------|-----|---------------|-------|
|   | RQ       | TPQ | List Chemical | Catg. |
| Polychlorotrifluoroethylene (9002-83-9) | No       | No  | No            | No    |

**Federal, State & International Regulations - Part 2**

| Ingredient                              | RCRA   |        | TSCA |
|---|--------|--------|------|
|   | CERCLA | 261.33 | 8(d) |
| Polychlorotrifluoroethylene (9002-83-9) | No     | No     | No   |

|  |                       |                    |                 |
|--|-----------------------|--------------------|-----------------|
| <b>Chemical Weapons Convention:</b> No | <b>TSCA 12(b):</b> No |                    | <b>CDTA:</b> No |
| <b>SARA 311/312:</b>                   | <b>Acute:</b> No      | <b>Chronic:</b> No | <b>Fire:</b> No |
| <b>Reactivity:</b> No                  | <b>Pressure:</b> No   |                    |                 |
|  | Pure / Solid          |                    |                 |

**16. OTHER INFORMATION**

*Effective Date:* 01/01/15 – Standardized for GHS / REACH

*Previous Revisions:* 09/05/08 – First Issue

**Disclaimer:** Halocarbon believes the information given here to be correct. However, we cannot guarantee its accuracy or be responsible for loss or damage that result from the use of such information.