

HALOCARBON PRODUCTS CORPORATION -- HALOCARBON TYPE II OIL -- 9150-01-101-8835

===== Product Identification =====

Product ID:HALOCARBON TYPE II OIL

MSDS Date:09/18/2000

FSC:9150

NIIN:01-101-8835

Status Code:A

MSDS Number: CLSDC

=== Responsible Party ===

Company Name:HALOCARBON PRODUCTS CORPORATION

Box:661

City:RIVER EDGE

State:NJ

ZIP:07661

Country:US

Info Phone Num:201-262-8899

Emergency Phone Num:

803-278-3504

Preparer's Name:DR. LEE G. SPAQUE

Chemtrec Ind/Phone:(800)424-9300

CAGE:UO752

=== Contractor Identification ===

Company Name:HALOCARBON PRODUCTS CORPORATION

Address:887 KINDERKAMACK RD

Box:City:RIVER EDGE

State:NJ

ZIP:07661

Country:US

Phone:201-262-8899

Contract Num:SP0450-02-M-L275

CAGE:07644

Company Name:HALOCARBON PRODUCTS CORPORATION

Address:Box:661

City:RIVER EDGE

State:NJ

ZIP:07661

Country:US

Phone:201-262-8899

CAGE:UO752

===== Composition/Information on Ingredients

=====

Ingred Name:PROPRIETARY RUST INHIBITOR

Ingred Name:POLYTRIFLUOROCHLOROETHYLENE
CAS:9002-83-9
RTECS #:KM6555000
Other REC Limits:NONE
OSHA PEL:NONE
ACGIH TLV:NONE

===== Hazards Identification =====

Routes of Entry: Inhalation:NO Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Effects of Overexposure:NAUSEA, SHORTNESS OF BREATH AND LOSS OF
APPETITE.
Medical Cond Aggravated by Exposure:NONE KNOWN

===== First Aid Measures =====

First Aid:INHALATION: N/A. EYE: FLUSH EYES WITH WATER FOR AT LEAST 15
MINUTES. SKIN: WASH WITH SOAP AND WATER. NO SKIN EFFECTS EXPECTED.
ORAL: DILUTE BY DRINKING LARGE QUANTITIES OF WATER. IF VOMITING
OCCURS AD MINISTER MORE WATER.

===== Fire Fighting Measures =====

Flash Point:NONE
Autoignition Temp:Autoignition Temp Text:NOT DE
Extinguishing Media:USE AGENT SUITABLE FOR SURROUNDING FIRE.
Fire Fighting Procedures:WEAR SELF CONTAINED BREATHING APPARATUS IF
THERE IS DANGER OF LEAKAGE
Unusual Fire/Explosion Hazard:THERMAL DECOMPOSITION PRODUCTS ARE TOXIC
AND CORROSIVE.

===== Accidental Release Measures =====

Spill Release Procedures:SPILLS MAY BE PICKED UP WITH AN ABSORBENT SUCH
AS VERMICULITE.

===== Handling and Storage =====

Other Precautions:SINCE THE POTENTIAL FOR HUMAN TOXICITY CANNOT BE
RULED OUT PROP

ER VENTILATION AND WORK PRACTICES SHOULD BE EMPLOYED.

===== Exposure Controls/Personal Protection =====

Ventilation:GENERAL ROOM VENTILATION PLUS LOCAL EXHAUST AT POINT OF EMISSION.

Protective Gloves:IMPERVIOUS GLOVES.

Eye Protection:SAFETY GLASSES OR FACE SHIELD.

Other Protective Equipment:NONE

Supplemental Safety and Health

===== Physical/Chemical Properties =====

HCC:N1

Boiling Pt:>260.C, 500.F

B.P. Text:DECOMPOSES

Vapor Pres:LESS THAN 0.1

MM HG

Spec Gravity:CA 2 (H2O=1)

Solubility in Water:NEGLIGIBLE

Appearance and Odor:COLORLESS OIL

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

ALUMINUM THREADED CONNECTIONS WHERE GALLING AND SEIZURE MAY INITIATE REACTION. REACTS WITH METALS LIKE SODIUM AND POTASSIUM, AMINES, LIQUID FLUORINE AND LIQUID CHLORINE TRIFLUORIDE.

Stability Condition to Avoid:THE MAXIMUM SAFE OPERATING TEMPERATURE RECOMMENDED IS 200C AND MAX

IMUM SHOT-TERM TEMPERATURE RECOMMENDED IS 260C IN SCRUPULOUSLY CLEAN SYSTEMS.

Hazardous Decomposition Products:THE DECOMPOSITION TO TOXIC, NON-SLUDGE FORMING VOLATILES OCCURS RAPIDLY AT 325C, NOTICEABLY AT 300C AND IN LESSER AMOUNTS AT LOWER TEMPERATURES.

Conditions to Avoid Polymerization:WILL NOT OCCUR

===== Toxicological Information =====

Toxicological Information:THIS OIL CAUSED NO DEATHS IN RATS DOSED DAILY FOR 21 DAYS WITH 2.5 G/KG ORALLY. SYM

PTOMS ATTRIBUTED TO FLUORIDE

POISONING BY METABOLISM IN THE LIVER WERE NOTED. ENLARGEMENT OF THE LIVERS AND KIDNEYS I N THE TREATED ANIMAL SUPPORT THIS CONCLUSION. EXTENSIVE STUDIES HAVE BEEN CONDUCTED ON LIGHTER, MORE VOLATILE HALOGARBON OILS. BASED ON ALL THE AVAILABLE DATA IN THREE SPECIES OF ANIMALS, LIMITED EXPO SURE 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. "SEE OTHER"

===== Disposal Considerations =====

Waste Disposal Methods:MAY BE INCINERATED BY LICENSED WASTE DISPOSAL COMPANY. OBSERVE ALL FEDERAL, STATE AND LOCAL REGULATIONS.

===== MSDS Transport Information =====

Transport Information:HAZARDOUS MATERIALS/DANGEROUS GOODS SHIPPING REGULATIONS: U.S (49 CFR): PROPER SHIPPING NAME: NON-HAZARDOUS MATERIAL. IATA: PROPER SHIPPING NAME: NON-D ANGEROUS GOODS. IMDG: PROPER SHIPPING NAME: NON-D ANGEROUS GOODS.

===== Regulatory Information =====

Federal Regulatory Information:OSHA HAZARD RATING: THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICAL(S) SUBJECT TO SECTION 313 TITLE III REPORTING REQUIREMENTS (40 CFR PART 372). NONE.
State Regulatory Information:

===== Other Information =====

=====

Disclaimer (provided with this information by the compiling agencies):
This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular

situation.