

MATERIAL SAFETY DATA SHEET

Effective Date: November 1, 1994

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MSDS : LCLB

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT CODE: Chlorinated Paraffin

PRODUCT NAME: CHLOROFLO 40

CAS #: 63449-39-8

PRODUCT USE: Lubricant, Lubricant Additive, Flame Retardant, Plastics Compounding

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2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS #	EXPOSURE LIMITS	% By Wt.
Chlorinated Paraffin	63449-39-8	Not established	100

This particular product has not been shown to have adverse effects in years of manufacture and use. Chlorinated paraffins are a class of compounds that are similarly manufactured but vary in molecular structure by carbon chain length and degree of chlorination.

EEC 67/548: Not applicable

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Clear, light amber liquid with slight to non-distinctive odor (See Section 9). Avoid contact with eyes and repeated or prolonged inhalation or contact with skin (See Section 3 below). Avoid contact with strong oxidizers and reducers. Protect against decomposition products of hydrogen chloride and oxides of carbon (See Sections 5, 7 and 10).

HMIS RATING: HEALTH: 1 FLAMMABILITY: 1 REACTIVITY: 1 PPE: B

POTENTIAL HEALTH EFFECTS

EYE: May cause eye irritation.

SKIN: Repeated or prolonged contact may cause skin irritation.

INGESTION: No hazard in normal industrial use.

INHALATION: High gas or vapor or mist concentrations may be harmful if inhaled repeatedly or for prolonged periods of time.

CHRONIC EFFECTS: Not listed as human carcinogen by OSHA, IARC, or NTP.

SIGNS AND SYMPTOMS: Eye, skin or respiratory tract irritation

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4. FIRST AID MEASURES

EYES: Hold eyelid open; flush with large volume of water; continue for 15 minutes. If irritation develops, seek medical attention.

SKIN: Wash area with mild soap and water. If irritation develops, seek medical attention.

INGESTION: If swallowed, induce vomiting as directed by medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: No specific treatment. This material is not likely to be hazardous by inhalation. If exposed to excessive levels of vapor or mist, remove to fresh air and seek medical attention.

NOTE TO PHYSICIANS: Treat as any exposure to any oil base material. (See Section 3 for observable SIGNS/ SYMPTOMS).

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES: Flash Point: 450 ° F Method: C.O.C. Burn Rate: Unknown

FLAMMABLE LIMITS: Lower flammable limit: Not established
Upper flammable limit: Not established

FLAMMABILITY CLASSIFICATION: Not established

AUTOIGNITION TEMPERATURE: Not established

HAZARDOUS COMBUSTION PRODUCTS: Hydrogen chloride, oxides of carbon

EXTINGUISHING MEDIA: Water fog; foam; dry chemical

ADDITIONAL CONSIDERATIONS: None

FIRE FIGHTING INSTRUCTIONS: Protect against decomposition products, wear self contained breathing apparatus. If this material is involved in a fire, keep surrounding containers cool with water spray and contain all runoff.

NFPA 704M RATING: **HEALTH:** 1 **FLAMMABILITY:** 1 **REACTIVITY:** 1 **SPECIAL:** -

6. ACCIDENTAL RELEASE MEASURES

Wear protective equipment (see Section 8); stop leak at source; dike area; prevent material from entering waterway; prevent contact with strong oxidizers and reducers (see Section 7); pump material to reclaim container; use absorbent on remaining material; and, shovel into disposal container.

7. HANDLING AND STORAGE

HANDLING: Do not wear contaminated clothing. Wash prior to eating, drinking, smoking, or use of restroom and when leaving work. Heating of non-vented container may cause container to rupture. Do not dispose of material or empty container to the environment.

STORAGE: Do not store near heat or open flame.

INCOMPATIBLE MATERIALS: Strong oxidizers and reducers

VENTILATION: Local exhaust, unless heating to vapor or mist

SPECIAL PACKAGING MATERIALS: Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Mechanical if heated to vapor and mist, facility should be equipped with safety shower and eye wash in area.

EYE/FACE PROTECTION: Face shield or chemical splash goggles

SKIN PROTECTION: Impervious gloves; chemical goggles; long sleeve shirt and trousers

RESPIRATORY PROTECTION: Not required under normal conditions of use, avoid vapor and mist without respiratory protection

EXPOSURE GUIDELINES: (See Section 2)

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, light amber liquid

ODOR: Slight to non-distinctive

PHYSICAL STATE: Liquid

pH: Not applicable

VAPOR PRESSURE: Unknown

VAPOR DENSITY: Heavier than air

BOILING POINT: Not applicable, material decomposes

MELTING POINT: Not applicable

SOLUBILITY IN WATER: Nil

SPECIFIC GRAVITY: 1.108 @ 50°/25° C

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal ambient and anticipated storage and handling conditions

CONDITIONS TO AVOID: Avoid heating to decomposition

INCOMPATIBILITY: Strong oxidizing and reducing agents

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride, oxides of carbon

HAZARDOUS POLYMERIZATION: Will not occur

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: Mild transient eye irritation

SKIN EFFECTS: Mild to moderate skin irritation

INGESTION EFFECTS: Male rat: 13 week oral; NOEL; 3750 mg/kg/day
 Female rat: 13 week oral; NOEL; 100 mg/kg/day
 Rat: 14 day oral; NOEL; 3000 mg/kg/day

INHALATION EFFECTS: No data

SUBCHRONIC EFFECTS: No data

CHRONIC EFFECTS/CARCINOGENICITY: Product not tested by OSHA, IARC, or NTP

EPIDEMIOLOGY: No data

TERATOLOGY: Pregnant Dutch belted rabbits: NOEL; 5000 mg/kg/day
 Pregnant Charles River COBS CD rats: 5000 mg/kg/day, no apparent embryotoxicity; minimal maternal effects

REPRODUCTIVE EFFECTS: Female rat: 13 week oral; 3750 mg/kg/day; Ovary target organ; accumulation in ovary not associated with any toxicological changes in that organ

NEUROTOXICITY: No data

MUTAGENICITY: Rat: 5000 mg/kg/day; In vivo cytogenetic evaluation by analysis of bone marrow did not produce any increase in frequency of chromosome or chromatid abnormalities. Not clastogenic

SYNERGISTIC PRODUCTS: No data

12. ECOLOGICAL INFORMATION

ECOTOXICITY: Rainbow trout: 60 day, mean concentration 4.0 mg/l; material not toxic; Bioconcentration factor of 3.6-9.0 times on total material figures
 Mussels: 60 day; NOEL; .32 mg/l; Bioconcentration of 87.2-1000 based on parent compound analysis

ENVIRONMENTAL FATE: No data

PHYSICAL/CHEMICAL: (See Sections 9 and 10)

13. DISPOSAL CONSIDERATIONS

According to local, state and federal regulations: The presence of chlorinated paraffin in a waste does not, by itself, make the waste hazardous. (40 CFR 261, Appendix VIII)

Because product uses, mixtures, processes, or contamination may render this material hazardous, it is the responsibility of the user/owner of the product to determine at the time of disposal, whether the product meets RCRA criteria for a hazardous waste. Dispose of this material and the empty containers, liners and rinsate according to current local, state, and federal regulations.

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14. TRANSPORTATION INFORMATION (Not meant to be all inclusive)

DOT SHIPPING NAME: Chlorinated Paraffin
 DOT HAZARD CLASS/DESCRIPTION: Not applicable
 DOT LABEL: Not applicable
 DOT PLACARD: Not applicable
 DOT UN/NA NUMBER: Not applicable
 DOT PRODUCT RQ: Not applicable

IMO CLASSIFICATION: Not applicable

EEC CLASSIFICATION: Not applicable
 EEC LABEL: Not applicable
 EEC R: Not applicable
 EEC S: Not applicable

TRANSPORT CANADA PIN: Not applicable

15. REGULATORY INFORMATION (Not meant to be all inclusive - selected regulations represented)

U.S. FEDERAL REGULATIONS:

TSCA: Appears in TSCA Inventory

OSHA: None

CERCLA SARA HAZARD CATEGORY:

SECTION 311 AND 312: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: None

SECTION 313: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: None

INTERNATIONAL REGULATIONS:

CANADIAN WHMIS: None

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA): Appears in the Domestic Substances List

EINECS: Appears in European Existing Chemical Substance Inventory

STATE REGULATIONS: No specific listing in California or New Jersey. Additional information available upon request.

16. OTHER INFORMATION

MSDS Status: Revised , March 25, 1998

The information herein is given in good faith, but no warranty, express or implied, is made. Consult **DOVER CHEMICAL CORPORATION** for further information.