

Section 1: IDENTIFICATION

Product Name: HD Film LCC (Liquid Corrosion Control)

Synonyms: Not available.

Product Use: Corrosion inhibitor / penetrant / lubricant for marine environments – for non-ferrous or ferrous as well as dissimilar metals / wherever there is excessive moisture.

Restrictions on Use: Not available.

Manufacturer/Supplier: Ship-2-Shore
109-7337 North Fraser Way
Burnaby, BC V5J 0G7
Canada

Phone Number: 800-430-1533

Emergency Phone: For Hazardous Materials [or Dangerous Goods] Incident
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC
1-800-424-9300 / +1 703-527-3887 CCN 991123

Date of Preparation of SDS: March 20, 2021

Section 2: HAZARD(S) IDENTIFICATION

GHS INFORMATION

Classification: Flammable Liquids, Category 4
Skin Irritation, Category 2
Germ Cell Mutagenicity, Category 1B
Carcinogenicity, Category 1B

Per GHS Flammability Categories:

- Category 1 liquids have flash points below 73.4°F (23°C) and boiling points at or below 95°F (35°C).
- Category 2 liquids have flashpoints below 73.4°F (23°C) and boiling points above 95°F (35°C).
- Category 3 liquids have flashpoints at or above 73.4°F (23°C) and at or below 140°F (60°C).
- Category 4 liquids have flash points above 140°F (60°C) and at or below 199.4°F (93°C).

LABEL ELEMENTS

Hazard

Pictogram(s):



Signal Word: Danger

Hazard Statements: Combustible liquid. Product does not sustain combustion, as per ASTM D4206 testing.
Causes skin irritation.



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May cause genetic defects.
May cause cancer.

Precautionary Statements

- Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wash hands thoroughly after handling. Wear protective gloves, protective clothing and eye protection.
Response: IF ON SKIN: Wash with plenty of water. IF exposed or concerned: Get medical attention. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish.
Storage: Store in a well-ventilated place. Keep cool. Store locked up.
Disposal: Dispose of contents and container in accordance with applicable regional, national and local laws and regulations.

Hazards Not Otherwise Classified: Not applicable.

Ingredients with Unknown Toxicity: 100% of this product mixture consists of ingredient(s) of unknown acute toxicity.

This material is considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200).

This material is considered hazardous by the Hazardous Products Regulations.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Table with 4 columns: Hazardous Ingredient(s), Common name / Synonyms, CAS No., % wt./wt. Rows include Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, high-viscosity; Lubricating oils (petroleum), C>25, hydrotreated bright stock-based; Stoddard solvent; Kerosine (petroleum).

Section 4: FIRST-AID MEASURES

Inhalation: If inhaled: Call a poison center or doctor if you feel unwell. Acute and delayed symptoms and effects: May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive

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inhalation may cause headache, dizziness, confusion, loss of appetite and/or loss of consciousness.

Eye Contact: If in eyes: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center or doctor if you feel unwell.

Acute and delayed symptoms and effects: May cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin Contact: If on skin: Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.

Acute and delayed symptoms and effects: Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

Ingestion: If swallowed: Call a poison center or doctor if you feel unwell. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Acute and delayed symptoms and effects: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

General Advice: In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

Note to Physicians: Symptoms may not appear immediately.

Section 5: FIRE-FIGHTING MEASURES

FLAMMABILITY AND EXPLOSION INFORMATION

Combustible liquid. Will be ignited by heat, sparks or flames. Vapor explosion hazard indoors, outdoors or in sewers. Containers may explode when heated.

Sensitivity to Mechanical Impact: This material is not sensitive to mechanical impact.

Sensitivity to Static Discharge: This material is sensitive to static discharge.

MEANS OF EXTINCTION

Suitable Extinguishing Media: Small Fire: Dry chemical, CO2, water spray or regular foam.
Large Fire: Water spray, fog or regular foam. Move containers from fire area if you can do it without risk.

Unsuitable Extinguishing Media: Not available.

Products of Combustion: Oxides of carbon.

Protection of Firefighters: Fire may produce irritating, corrosive and/or toxic gases. Runoff from fire control or dilution water may cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

Section 6: ACCIDENTAL RELEASE MEASURES

- Emergency Procedures:** Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Personal Precautions:** Do not touch or walk through spilled material. Use personal protection recommended in Section 8.
- Environmental Precautions:** Keep out of drains, sewers, ditches, and waterways.
- Methods for Containment:** Stop leak if without risk. Contain spill and absorb with inert absorbent. Large pools may be covered with foam to prevent vapour evolution. Do not flush to sewer or allow to enter waterways.
- Methods for Clean-Up:** Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. Large spills should be removed with explosion proof vacuum equipment.
- Other Information:** See Section 13 for disposal considerations.

Section 7: HANDLING AND STORAGE

Handling:

Do not swallow. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wash hands thoroughly after handling. See Section 8 for information on Personal Protective Equipment.

Storage:

Store in a well-ventilated place. Keep cool. Store locked up. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, high-viscosity [CAS No. 72623-85-9]

ACGIH: A2; Exposure by all routes should be carefully controlled to levels as low as possible (2009); For Mineral oil, excluding metal working fluids; Poorly and mildly refined

OSHA: 5 mg/m³ (TWA); For Oil mist, mineral.

Lubricating oils (petroleum), C>25, hydrotreated bright stock-based [CAS No. 72623-83-7]



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ACGIH: A2; Exposure by all routes should be carefully controlled to levels as low as possible (2009); For Mineral oil, excluding metal working fluids; Poorly and mildly refined

OSHA: 5 mg/m³ (TWA); For Oil mist, mineral.

Stoddard solvent [CAS No. 8052-41-3]

ACGIH: 100 ppm (TWA); (1980);

OSHA: 500 ppm (TWA), 2900 mg/m³ (TWA);
100 ppm (TWA) [Vacated];

Kerosene [CAS No. 8008-20-6]

ACGIH: 200 mg/m³ (TWA); Skin; A3; Application restricted to conditions in which there are negligible aerosol exposures (2003)

OSHA: No PEL established.

TWA: Time-Weighted Average

STEL: Short-Term Exposure Limit

C: Ceiling

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas, etc.) below recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT (PPE)



Eye/Face Protection: Wear safety glasses with side shields. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.

Hand Protection: Wear protective gloves. For occasional contact wear standard disposable nitrile or Viton gloves. For extended exposure wear Neoprene gloves.

Skin and Body Protection: Wear protective clothing.

Respiratory Protection: Not normally required. If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator that meets the requirements of CSA Standard CAN/CSA-Z94.4, with organic vapor cartridge, or self-contained breathing apparatus must be used.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices. Consult a competent industrial hygienist to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES



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Appearance:	Dark orange liquid.
Colour:	Dark orange.
Odour:	Fresh Scent/Petroleum-like.
Odour Threshold:	Not available.
Physical State:	Liquid.
pH:	Not available.
Melting Point / Freezing Point:	6 °C (42.8 °F) (Pour Point) (ASTM D97)
Initial Boiling Point:	145°C (293°F) (ASTM D2887)
Boiling Range:	145°C to 549°C
Flash Point:	78°C (172.4°F) (ASTM D93)
Evaporation Rate:	Not available.
Flammability (solid, gas):	Not applicable.
Lower Flammability Limit:	Not available.
Upper Flammability Limit:	Not available.
Vapor Pressure:	Not available.
Vapor Density:	>1 (Air = 1)
Relative Density:	0.86 (Water = 1) at 15.6°C (60.1°F) (ASTM D4052)
Solubilities:	Slightly miscible in water.
Partition Coefficient: n-Octanol/Water:	Not available.
Auto-ignition Temperature:	Not available.
Decomposition Temperature:	Not available.
Viscosity:	22500 Brookfield cP at 25°C (77°F) (ASTM D2196)
Percent Volatile, wt. %:	Not available.
VOC content, wt. %:	0.33%
Density:	0.9 kg/L (ASTM D1217-15)
Coefficient of Water/Oil Distribution:	Not available.

Section 10: STABILITY AND REACTIVITY

Reactivity:	Contact with incompatible materials. Sources of ignition. Exposure to heat.
Chemical Stability:	Stable under normal storage conditions.



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Possibility of Hazardous Reactions: None known.

Conditions to Avoid: Contact with incompatible materials. Sources of ignition. Exposure to heat.

Incompatible Materials: Strong oxidizers.

Hazardous Decomposition Products: Not available.

Section 11: TOXICOLOGICAL INFORMATION

EFFECTS OF ACUTE EXPOSURE

Product Toxicity

Oral: Not available.

Dermal: Not available.

Inhalation: Not available.

Component Toxicity

Component	CAS No.	LD ₅₀ oral	LD ₅₀ dermal	LC ₅₀
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, high-viscosity	72623-85-9	Not available.	Not available.	Not available.
Lubricating oils (petroleum), C>25, hydrotreated bright stock-based	72623-83-7	Not available.	Not available.	Not available.
Stoddard solvent	8052-41-3	Not available.	Not available.	Not available.
Kerosene	8008-20-6	> 2835 mg/kg (rabbit)	> 2000 mg/kg (rabbit)	> 5000 mg/m ³ (rat); 4H

Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion.

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Kidneys. Central nervous system.

Symptoms (including delayed and immediate effects)

Inhalation: May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive inhalation may cause headache, dizziness, confusion, loss of appetite and/or loss of consciousness.

Eye: May cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin: Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching.



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Ingestion: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Skin Sensitization: Not available.

Respiratory Sensitization: Not available.

Medical Conditions Aggravated By Exposure: Not available.

EFFECTS OF CHRONIC EXPOSURE (from short and long-term exposure)

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Kidneys. Central nervous system.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation.

Carcinogenicity: May cause cancer. Straight run Kerosene has shown the potential to cause skin cancer in laboratory animals when applied over the life time of the animal.

Component Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Prop 65
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, high-viscosity	A2	Not listed.	Not listed.	Not listed.	Not listed.
Lubricating oils (petroleum), C>25, hydrotreated bright stock-based	A2	Not listed.	Not listed.	Not listed.	Not listed.
Kerosene	A3	Not listed.	Not listed.	Not listed.	Not listed.

Mutagenicity: May cause genetic defects.

Reproductive Effects: Not available.

Developmental Effects

Teratogenicity: Not available.

Embryotoxicity: Not available.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Other Adverse Effects: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions: Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

Section 14: TRANSPORT INFORMATION

U.S. Department of Transportation (DOT)

Proper Shipping Name: Not regulated. Product does not sustain combustion, as per ASTM D4206 testing.

Class: Not applicable.

UN Number: Not applicable.

Packing Group: Not applicable.

Label Code: Not applicable.

Canada Transportation of Dangerous Goods (TDG)

Proper Shipping Name: Not regulated.

Class: Not applicable.

UN Number: Not applicable.

Packing Group: Not applicable.

Label Code: Not applicable.

Section 15: REGULATORY INFORMATION

Chemical Inventories

US (TSCA)

The components of this product are in compliance with the chemical notification requirements of TSCA.

Canada (DSL)

The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

Federal Regulations

United States

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III

No components are listed.

State Regulations

Massachusetts



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US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

Component	CAS No.	RTK List
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, high-viscosity	72623-85-9	Listed.
Lubricating oils (petroleum), C>25, hydrotreated bright stock-based	72623-83-7	Listed.
Stoddard solvent	8052-41-3	Listed.
Kerosene	8008-20-6	Listed.

New Jersey

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

Component	CAS No.	RTK List
Stoddard solvent	8052-41-3	Listed.
Kerosene	8008-20-6	Listed.

Pennsylvania

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

Component	CAS No.	RTK List
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, high-viscosity	72623-85-9	Listed.
Lubricating oils (petroleum), C>25, hydrotreated bright stock-based	72623-83-7	Listed.
Stoddard solvent	8052-41-3	Listed.
Kerosene	8008-20-6	Listed.

Section 16: OTHER INFORMATION

Disclaimer:

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for their own particular use.

Date of Preparation of SDS: August 30, 2021

Version: 1.2

GHS SDS Prepared by: Deerfoot Consulting Inc.

Phone: (403) 720-3700