



May 05, 2014

# The X-1R Corporation

## Material Safety Data Sheet

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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**PRODUCT NAME:** X-1R HD Fleet Oil additive (Chlorine free)

**MANUFACTURER:** The X-1R Corporation  
**ADDRESS:** 375 Fentress Blvd. Daytona Beach, FL 32114

**PRODUCT INFORMATION:** 1-386-271-7000  
**EMERGENCY PHONE:** 1-800-424-9300 (Inside U.S.)  
1-703-527-3887 (Outside U.S.)

**FAX:** 1-386-271-7001

**CHEMICAL NAME:** Not Applicable  
**CHEMICAL FAMILY:** Lubricating Oil  
**CHEMICAL FORMULA:** Proprietary

**PRODUCT USE:** Oil additive used to reduce wear and friction.

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### SECTION 2: HAZARDS IDENTIFICATION

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**EMERGENCY OVERVIEW:** Clear, amber/brown liquid with slight odor. Avoid contact with eyes and repeated or prolonged inhalation or contact with skin (See Section 3 below). Avoid contact with strong oxidizers and reducers.

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

**ROUTES OF ENTRY:** Skin contact, inhalation of vapor, ingestion, are possible.

**POTENTIAL HEALTH EFFECTS:**

**EYES:** May cause eye irritation

**SKIN:** Repeated or prolonged contact may cause skin irritation.

**INGESTION:** Do not ingest. Not expected to be toxic under normal conditions of use.

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

**ACUTE HEALTH HAZARDS:** None Known.

**CHRONIC HEALTH HAZARDS:** Not listed as human carcinogen by OSHA, IARC, or NTP.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** None Known.

MSDS No: X1R0514HDFOA001

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### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>Wt%</u>
Proprietary Chlorine-Free EP Additive	-	25 - 50
Proprietary Aliphatic Ester	-	10 - 20
Proprietary Chlorine-Free FR-AW Additives	Mixture	25 - 50
Amides, coco, N,N-bis(hydroxyethyl), reaction products with coco monoglycerides and molybdenum oxide	445409-27-8	1 - 2
Amines, bis(C11-14-branched and linear alkyl), tungstates	1159919-46-6	1 - 4
Petroleum process oil, <3.0% DMSO extractable material	64742-52-5	2 - 5

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### SECTION 4: FIRST AID MEASURES

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**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:** Have victim rinse mouth thoroughly with water. Do not induce vomiting without medical advice. If ingestion of a large amount does occur, seek medical attention. 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.

**NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:** Treat as any exposure to any oil based material (See Section 3 for observable signs/symptoms).

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## SECTION 5: FIRE FIGHTING MEASURES

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**FLAMMABLE PROPERTIES:** Flash Point: > 300°F (Method: P.M.C.C.) Burn Rate: Unknown

**FLAMMABLE LIMITS:** Lower Flammable Limit: Not Established.  
Upper Flammable Limit: Not Established.

**FLAMMABILITY CLASSIFICATION:** Not Flammable.

**AUTOIGNITION TEMPERATURE:** Not Established.

**HAZARDOUS COMBUSTION PRODUCTS:** Oxides of carbon, Oxides of Nitrogen, Metal oxides

**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 fire, keep surrounding containers cool with water spray and contain all runoff.

**NFPA RATING:**

**HEALTH:** 1                      **FLAMMABILITY:** 1                      **REACTIVITY:** 1                      **PPE:** B

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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**Personal Precautions:** Use personal protective equipment. Ensure adequate ventilation. Do not touch or walk through spilled material. Keep unnecessary personnel away.

**Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Do not contaminate water.

**Methods for containment:** Eliminate all sources of ignition or flammables that may come into contact with a spill of this material. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. Dike the spilled material, where this is possible.

**Methods for cleaning up:** Should not be released into the environment.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Dike far ahead of liquid spill for later disposal. Cover with plastic sheet to prevent spreading. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. For waste disposal, see section 13 of theMSDS. Wear appropriate protective equipment and clothing during clean-up.

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## SECTION 7: HANDLING AND STORAGE

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**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

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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**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 LIMITS:

#### Petroleum process oil, <3.0% DMSO extractable material:

ACGIH TLV (United States, 3/2012):	TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction
NIOSH REL (United States, 1/2013):	TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Mist
	STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Mist
ACGIH TLV (United States):	STEL: 10 mg/m <sup>3</sup>
OSHA PEL (United States, 6/2010):	TWA: 5 mg/m <sup>3</sup> 8 hours.

**Proprietary Chlorine-Free EP Additive:** Exposure limits not established.

**Proprietary Aliphatic Ester:** Exposure limits not established.

**Proprietary Chlorine-Free FR-AW Additives:** Exposure limits not established.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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<b>APPEARANCE:</b>	Amber/Brown Liquid
<b>ODOR:</b>	Slight Petroleum
<b>PHYSICAL STATE:</b>	Liquid
<b>pH:</b>	Not available
<b>BOILING POINT:</b>	Not available
<b>MELTING POINT:</b>	Not available
<b>VAPOR PRESSURE:</b>	Not available
<b>VAPOR DENSITY (AIR = 1):</b>	Heavier than air
<b>SPECIFIC GRAVITY (H<sub>2</sub>O = 1):</b>	0.91 - 0.94
<b>SOLUBILITY IN WATER:</b>	Not available

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## SECTION 10: STABILITY AND REACTIVITY

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

**CONDITIONS TO AVOID:** Avoid heating to decomposition

**INCOMPATIBILITY (MATERIAL TO AVOID):** Strong oxidizing and reducing agents

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** Oxides of carbon, Oxides of nitrogen, Metal oxides

**HAZARDOUS POLYMERIZATION:** Will not occur

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## SECTION 11: TOXICOLOGICAL INFORMATION

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### TOXICOLOGICAL DATA:

#### Proprietary Chlorine-Free EP Additive:

Acute Dermal LD50 Rat: > 2000 mg/kg

Acute Oral LD50 Rat: > 2000 mg/kg

**Petroleum process oil, <3.0% DMSO extractable material**

LD50 Dermal Rabbit: >2000 mg/kg

LD50 Oral Rat: >5000 mg/kg

**Amines, bis(C11-14-branched and linear alkyl), tungstates**

LD50 Oral Rat: >5000 mg/kg

**Acute toxicity:** Not classified

**Skin corrosion/irritation:** Not classified

**Respiratory or skin sensitization:** Not classified

**Serious eye damage/irritation:** Causes eye irritation.

**Carcinogenicity:** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. No carcinogenicity data available for this product.

**Epidemiology:** No epidemiological data is available for this product.

**Mutagenicity:** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Neurological effects:** No data available for this product.

**Teratogenicity** No data available to indicate product or any components present at greater than 0.1% may cause birth defects.

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## SECTION 12: ECOLOGICAL INFORMATION

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### ECOTOXICITY DATA:

**Proprietary Chlorine-Free EP Additive:**

EC50 Algae: 171.07 mg/l 72.00 hours

EC50 Daphnia: > 100 mg/l 48.00 hours

LC50 Fish: > 100 mg/l 96.00 hours

**Amines, bis(C11-14-branched and linear alkyl), tungstates:**

OECD 202 Acute EC50: 4.6 mg/l Daphnia 48 hours

OECD 201 Acute EC50: 0.00088 mg/l Algae 72 hours

OECD 201 Acute NOEC: 0.00015 mg/l Algae 72 hours

**ENVIRONMENTAL EFFECTS:** No data

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## SECTION 13: DISPOSAL CONSIDERATIONS

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**Waste Codes:** Waste codes should be assigned by the user based on the application for which the product was used.

**Disposal Instructions:** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.

**Waste from residues /unused products:** Dispose of in accordance with local regulations.

**Contaminated Packaging:** Do not re-use empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

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## SECTION 14: TRANSPORT INFORMATION

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### DOT:

<b>PROPER SHIPPING NAME:</b>	Not Regulated by DOT
<b>HAZARD CLASS/DESCRIPTION:</b>	N.A.
<b>UN/NA NUMBER:</b>	N.A.
<b>PACKING GROUP:</b>	N.A.
<b>DOT LABEL(S):</b>	None

### IMO/IMDG:

<b>PROPER SHIPPING NAME:</b>	Not regulated by IMO/IMDG
<b>HAZARD CLASS/DESCRIPTION:</b>	N/A
<b>UN/NA NUMBER:</b>	N/A
<b>PACKING GROUP:</b>	N/A
<b>MARINE POLLUTANT:</b>	No
<b>IMO LABEL:</b>	None

### IATA/ICAO:

<b>PROPER SHIPPING NAME:</b>	Not Regulated by IATA/ICAO
<b>HAZARD CLASS/DESCRIPTION:</b>	N.A.
<b>UN/NA NUMBER:</b>	N.A.
<b>PACKING GROUP:</b>	N.A.

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## SECTION 15: REGULATORY INFORMATION

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### U.S. FEDERAL REGULATIONS:

**TSCA:** All components listed or exempted.

**OSHA:** See Section 8 for exposure limits.

### 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):** Additional information available upon request.

**EINECS:** Additional information available upon request.

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

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## SECTION 16: OTHER INFORMATION

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The information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of The X-1R Corporation. The Data on this sheet related only to the specific material designed herein. The X-1R Corporation assumes no legal responsibility for the use or reliance on this data.

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