



June 15, 2004

# The X-1R Corporation

## Material Safety Data Sheet

---

---

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

---

**PRODUCT NAME:** X-1R Concentrate Engine Treatment

**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.  
**APPROVED BY:** J. A. Ketchledge

---

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

---

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>EXPOSURE LIMITES</u>
Stabilized Chlorinated Paraffin	63449-39-8	Not Established
Proprietary aliphatic Ester	125537-14-6	Not Established
Proprietary Ester	19321-40-5	Not Established
Barium Petroleum Sulfonate	61790-48-5	Not Established
Mixture of alkylated diphenyl-amines	68921-45-9	Not Established

---

This particular product has not been shown to have adverse effects in years of manufacture and use.

EEC 67/548: Not Applicable

MSDS No: X1R0604E001

---

### SECTION 3: HAZARDS IDENTIFICATION

---

**EMERGENCY OVERVIEW:** Clear, 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.

**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:** No hazard in normal industrial 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.

---

### SECTION 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.

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

---

## SECTION 5: FIRE FIGHTING MEASURES

---

**FLAMMABLE PROPERTIES:** Flash Point: >400 °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 fire, keep surrounding containers cool with water spray and contain all runoff.

**NFPA 704M RATING:**

**HEALTH:** 1

**FLAMMABILITY:** 1

**REACTIVITY:** 1

**SPECIAL:** -

---

## SECTION 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.

---

## SECTION 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

---

## SECTION 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).

---

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

---

<b>APPEARANCE:</b>	Light amber liquid
<b>ODOR:</b>	Slight to non-distinctive
<b>PHYSICAL STATE:</b>	Liquid
<b>pH:</b>	7 in 10% water solution
<b>BOILING POINT:</b>	Not applicable, material decomposes
<b>MELTING POINT:</b>	Not applicable
<b>VAPOR PRESSURE:</b>	Unknown
<b>VAPOR DENSITY (AIR = 1):</b>	Heavier than air
<b>SPECIFIC GRAVITY (H<sub>2</sub>O = 1):</b>	1.2 @ 25 <sup>0</sup> /25 <sup>0</sup> C
<b>SOLUBILITY IN WATER:</b>	Nil

---

## SECTION 10: STABILITY AND REACTIVITY

---

**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:** Hydrogen chloride, oxides of carbon

**HAZARDOUS POLYMERIZATION:** Will not occur

---

## SECTION 11: TOXICOLOGICAL INFORMATION

---

### Chlorinated Paraffin

**EYE EFFECTS:** Mild transient eye irritation

**SKIN EFFECTS:** Mild to moderate skin irritation

**INGESTION EFFECTS:** **Rat:** 13 week oral; No-Observable-Effect-Level (NOEL); 10 mg/kg/day  
**Rat:** 5 day oral; 5000 mg/kg/day; no fatalities or macroscopic lesions

**INHALATION EFFECTS:** No data

**SUBCHRONIC EFFECTS:** **Rats:** 14-day diet; NOEL; 1500 ppm; Liver target organ

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

**EPIDEMIOLOGY:** No data

**TERATOLOGY:** **Rat:** 5000 mg/kg/day; no teratogenic response  
**Pregnant Dutch belted rabbits:** Oral; 100 mg/kg/day; no teratogenic response  
**Pregnant Charles River COBS CD rats:** 2500 mg/kg/day; no apparent embryotoxicity

**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; Invivo 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

---

## SECTION 12: ECOLOGICAL INFORMATION

---

### Chlorinated Paraffin

**ECOTOXICITY:** **Rainbow trout:** 60 day; mean concentration 4.5 mg/l; material not toxic; Bioconcentration factor of 32-42times on parent compound  
**Mussels:** 60 day; NOEL; .22 mg/l; Bioconcentration of 339-2182 based on parent compound analysis

**ENVIRONMENTAL FATE:** No data

**PHYSICAL/CHEMICAL:** (See Sections 9 and 10)

---

## SECTION 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 of 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.

---

## SECTION 14: TRANSPORT INFORMATION

---

<b>DOT SHIPPING NAME:</b>	Chlorinated Paraffin
<b>DOT HAZARD CLASS/DESCRIPTION:</b>	Not applicable
<b>DOT LABEL:</b>	Not applicable
<b>DOT PLACARD:</b>	Not applicable
<b>DOT UN/NA NUMBER:</b>	Not applicable
<b>DOT PACKING GROUP:</b>	Not applicable
<b>DOT PRODUCT RQ:</b>	Not applicable
<b>IMO CLASSIFICATION:</b>	Not applicable
<b>EEC CLASSIFICATION:</b>	Not applicable
<b>EEC LABEL:</b>	Not applicable
<b>EEC R:</b>	Not applicable
<b>EEC S:</b>	Not applicable
<b>TRANSPORT CANADA PIN:</b>	Not applicable

---

## SECTION 15: REGULATORY INFORMATION

---

### U.S. FEDERAL REGULATIONS:

**TSCA:** All components 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: barium compound 3%.

### 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.

---

## SECTION 16: OTHER INFORMATION

---

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.

---

End of Document