



# Royal Purple, Ltd.

## Material Safety Data Sheet

I. Product Name: **Max-Cycle®** Date Issued/Revised: December 12, 2003  
Chemical Family: Synthetic based lubricating oil  
Use: Lubricant and corrosion inhibitor  
Manufacturer: Royal Purple, Ltd.  
Address: 1 Royal Purple Lane, Porter, Texas 77365 USA  
Phone: 281-354-8600 Emergency Phone: 281-354-8600 Fax: 281-354-7600

II. Components:  
• Base Oil (synthetic) — Synthetic additives with iso-paraffinic diluents.  
• The precise composition of this oil is proprietary. A more complete disclosure will be provided to a physician or nurse in the event of a medical emergency.  
• All components of this product are listed on the U.S. TSCA inventory.  
• This product contains no hazardous substances within the definition of OSHA Regulation 29 CFR 1910.1200.  
• Royal Purple certifies that this product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form.

III. Main Hazards / Health Effects:  
Eyes: May cause irritation.  
Inhalation: Oil mist may line breathing passages with oil making breathing difficult.  
Ingestion: May cause diarrhea.  
Skin: May irritate the skin after prolonged periods of contact.

IV. First Aid:  
Eyes: Flush with water until all residual material is gone. If irritation persists, seek medical help.  
Inhalation: Clear air passage. If respiratory difficulty continues, seek medical help.  
Ingestion: Wash out mouth immediately. Do not induce vomiting. Consult physician.  
Skin: Wash thoroughly with hand cleanser, followed by soap and water. Contaminated clothing should be dry cleaned before reuse.

V. Extinguishing Media:  
Suitable: Foam, dry powder, Halon®, carbon dioxide, sand, earth and water mist.  
Unsuitable: Water jet.  
Protective Equipment for Fire Fighting: Self-contained breathing apparatus.

VI. Accidental Release Measures:  
Personal Precautions: Wear gloves and protective overalls.  
Environmental Precautions: Do not allow it to enter drains.  
Spillage: Contain spill and keep from entering waterways. Absorb on porous material. Large quantities can be pumped.

VII. Handling and Storage:  
Handling: No special handling precautions necessary.  
Storage: Do not store at elevated temperatures.

VIII. Exposure Control / Personal Protection:  
Respiratory Protection: Hydrocarbon absorbing respirator if misting.  
Hand Protection: Oil-proof gloves for hypersensitive persons.  
Eye Protection: Glasses, if applied to parts in motion.  
Body Protection: Overalls.

IX. Physical and Chemical Properties:  
Physical State: Liquid  
Color: Purple  
Odor: Lube Oil  
pH: Neutral  
Boiling Range / Point °F (°C): >420 (>218)  
Pour Point °F (°C): <40 (<4.4)  
Flash Point (COC) °F (°C): >400 (>204)  
Autoignition Temperature °F (°C): >600 (>315)  
Evaporation Rate (Butyl Acetate): Negligible  
Vapor Pressure (kPa): <0.1  
Percent Volatiles: None  
Density (g/cm³): >0.87  
Flammability: Not flammable at ambient temp.  
OAR Value: UN  
Oxidizing Properties: None  
Water Solubility: Emulsifiable  
Vapor Density: Greater than air

Product Name: **Max-Cycle®**

**X. Stability and Reactivity:**  
**Stability:** Chemically stable under normal conditions. No photoreactive agents.  
**Conditions to Avoid:** Powerful sources of ignition and extreme temperatures.  
**Materials to Avoid:** Strong inorganic and organic acids, oxidizing agents.  
**Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon, sulfur and nitrogen. Residue mainly comprised of soot and mineral oxides.

**XI. Toxicological Information:**  
**Acute Toxicity:** Not known  
**Irritancy-Skin:** Very mild  
**Skin Sensitization:** Not known  
**Subacute / Sub-chronic Toxicity:** Not known  
**Genotoxicity:** None known  
**Chronic Toxicity:** None known

**California Prop 65:** N/A  
**Carcinogen:** NTP: No  
**IARC:** No  
**OSHA:** No  
**EC Classification (67 / 548 / EEC):** No  
**LC-50:** >2000mg/l - extrapolated from component data  
**LD-50:** Not applicable

**XII. Ecological Information:**  
**Possible Effects:** In extreme cases, may germinate oil fractions that could act as a marine pollutant. Occurrences of this nature are highly unlikely.  
**Behavior:** Relatively well behaved. Bioaccumulation potential nil.  
**Environmental Fate:** Due to its fluid nature and specific gravity, this product will float or spread across water making it a nuisance contaminant. It is not thought to be toxic to marine or land organisms.

**XIII. Waste and Container Disposal:**  
**Waste Disposal:** Consider recycling. This product, as sold, does not meet the RCRA characteristics of a hazardous waste. Under RCRA, it is the responsibility of the user, at the time of disposal, to determine whether the product meets the RCRA criteria for hazardous waste. Contact a waste disposal company or local authority for advice.  
**Container Disposal:** See waste disposal section listed above.

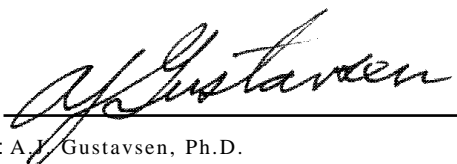
**XIV. Transport Information:**  
**DOT:** Nonhazardous  
**UN No.:** N/A  
**DOT:** Nonhazardous

**Air Transport (ICAO, IATA):** Bulk Nonhazardous  
**Sea Transport (IMO, IMDG):** Bulk Nonhazardous  
**Road and Rail Transport (ADR / RID):** Bulk Nonhazardous

**XV. Regulatory Information:**  
**Labeling Information:** None needed  
**EC Annex 1 Class.:** N/A  
**R Phrases:** N/A  
**SARA 311 / 312:** None  
**S Phrases:** S-3 keep cool, S-16 keep away from ignition sources  
**Ozone Depleting Chemicals:** N/A

**CERCLA:** Nonhazardous  
**TSCA:** All components are listed  
**WHMIS (Canada):** Not regulated  
**Canadian DSL:** All components are listed  
**40 CFR Part 372 (SARA Section 313):** N/A  
**RCRA Hazard Class:** Nonhazardous  
**TSCA 12B Components:** None

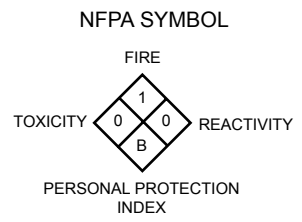
**XVI. Other Information:**

Signature:   
Prepared By: A.J. Gustavsen, Ph.D.

Date Issued/Revised: December 12, 2003

As of issue date, the information contained herein is accurate and reliable to the best of Royal Purple's knowledge. Royal Purple does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

LEGEND	
I.	Identification of the Substance / Preparation and Company
II.	Composition Information on Ingredients
III.	Hazards Identification
IV.	First Aid Measures
V.	Fire Fighting Measures
VI.	Accidental Release Measures
VII.	Handling and Storage
VIII.	Exposure Control / Personal Protection
IX.	Physical and Chemical Properties
X.	Stability and Reactivity
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XII.	Ecological Information
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XVI.	Other Information



**HMIS SYMBOL**

HEALTH	0
FLAMMABILITY	1
REACTIVITY	0
PPI	B