



MATERIAL SAFETY DATA SHEET

Oil Enhancer

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Oil Enhancer
Product Number: 203000C Oil Enhancer 4 x 3.79 L
203100C Oil Enhancer 12 x 946 mL
Product Use: Motor oil additive.
Manufacturer/Supplier: R.B. Howes & Co., Inc. / Howes Lubricator
60 Ocean State Drive
North Kingstown, RI 02852
Phone Number: 1-401-294-5500, 1-800 GET HOWES (438-4693)
Emergency Phone: CHEMTREC 1-800-424-9300
Date of Preparation: June 1, 2015

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING

IRRITATING TO EYES. MAY CAUSE SKIN IRRITATION.

Potential Health Effects: See Section 11 for more information.

Likely Routes of Exposure: Skin contact, eye contact, inhalation, and ingestion.

- Eye:** Irritating to eyes.
Skin: May cause skin irritation.
Ingestion: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.
Inhalation: May cause respiratory tract irritation.

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

Signs and Symptoms: Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Medical Conditions Aggravated By Exposure: Asthma. Allergies.

Target Organs: Skin, eyes, gastrointestinal tract, respiratory system.

Potential Environmental Effects: May cause long-term adverse effects in the aquatic environment. See Section 12 for more information.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS #	Wt. %
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	60 - 100
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	68649-42-3	1 - 5

Section 4: FIRST AID MEASURES

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.

Skin Contact: If irritation occurs, flush skin with plenty of soap and water. Get medical attention if irritation persists.

Inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

Ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Seek medical attention or call poison control immediately.

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

Note to Physicians: Symptoms may not appear immediately.

Section 5: FIRE FIGHTING MEASURES

Flammability: Not flammable by WHMIS criteria.

Means of Extinction:

Suitable Extinguishing Media: Powder, foam, carbon dioxide.

Unsuitable Extinguishing Media: Do not use water. Water may cause frothing.

Products of Combustion: May include, and are not limited to: oxides of carbon, oxides of nitrogen, oxides of zinc, hydrocarbons, hydrogen sulfide, alkyl mercaptans, sulfides.

Explosion Data:

Sensitivity to Mechanical Impact: Not available.

Sensitivity to Static Discharge: Not available.

Protection of Firefighters: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental Precautions: Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.

Methods for Containment: Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Clean-Up: Scoop up material and place in a disposal container. Provide ventilation.

Other Information: Not available.

Section 7: HANDLING AND STORAGE

Handling:

Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Handle and open container with care. When using do not eat or drink. Wash hands before eating, drinking, or smoking.

Storage:

Keep out of the reach of children. Keep container tightly closed. Store in a cool, dry place.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**Exposure Guidelines**

Ingredient	Exposure Limits ACGIH-TLV
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Not available.
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	Not available.

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

Personal Protective Equipment:

Eye/Face Protection: Wear eye/face protection.

Hand Protection: Wear suitable gloves.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Translucent.
Colour:	Amber.
Odour:	Distinctive.
Odour Threshold:	Not available.
Physical State:	Liquid.
pH:	Not available.
Viscosity:	791.7 cSt @ 40C (104 °F)
Freezing Point:	Not available.
Boiling Point:	Not available.
Flash Point:	> 176.7 °C (> 350.06 °F)
Evaporation Rate:	Not available.
Lower Flammability Limit:	Not available.
Upper Flammability Limit:	Not available.
Vapor Pressure:	Not available.
Vapor Density:	Not available.
Specific Gravity:	Not available.
Solubility in Water:	Not available.
Coefficient of Water/Oil Distribution:	Not available.
Auto-ignition Temperature:	Not available.
Percent Volatile, wt. %:	Not available.
VOC content, wt. %:	Not available.

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions.

Conditions of Reactivity: Heat. Incompatible materials.

Incompatible Materials: Strong oxidizers.

Hazardous Decomposition Products: May include, and are not limited to: oxides of carbon, oxides of nitrogen, oxides of zinc, hydrocarbons, hydrogen sulfide, alkyl mercaptans, sulfides.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

Section 11: TOXICOLOGY INFORMATION**EFFECTS OF ACUTE EXPOSURE****Component Analysis**

Ingredient	LD ₅₀ (oral)	LC ₅₀
Distillates (petroleum), solvent-dewaxed heavy paraffinic	> 5000 mg/kg, rat	2.18 mg/L 4hr, rat
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	Not available.	Not available.

Eye: Irritating to eyes. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Skin: May cause skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Ingestion: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

Inhalation: May cause respiratory tract irritation.

EFFECTS OF CHRONIC EXPOSURE

Target Organs: Not available.

Chronic Effects: Not hazardous by WHMIS criteria.

Carcinogenicity: Not hazardous by WHMIS criteria.

Ingredient**Chemical Listed as Carcinogen or Potential Carcinogen ***

Distillates (petroleum), solvent-dewaxed heavy paraffinic	Not listed.
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	Not listed.

* See Section 15 for more information.

Mutagenicity: Not hazardous by WHMIS criteria.

Reproductive Effects: Not hazardous by WHMIS criteria.

Developmental Effects:

Teratogenicity: Not hazardous by WHMIS criteria.

Embryotoxicity: Not hazardous by WHMIS criteria.

Respiratory Sensitization: Not hazardous by WHMIS criteria.

Skin Sensitization: Not hazardous by WHMIS criteria.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: May cause long-term adverse effects in the aquatic environment.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions:

This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

Section 14: TRANSPORTATION INFORMATION

TDG Classification

Not regulated

Section 15: REGULATORY INFORMATION

Federal Regulations

Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Global Inventories

Ingredient

Distillates (petroleum), solvent-dewaxed heavy paraffinic
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts

**Canada
DSL/NDSL
DSL
DSL**

HMIS - Hazardous Materials Identification System

Health - 1

Flammability - 1

Physical Hazard - 0

PPE - B

NFPA - National Fire Protection Association:

Health - 1

Fire - 1

Reactivity - 0

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

WHMIS Classification(s):

Class D2B - Skin/Eye Irritant

WHMIS Hazard Symbols:



SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

ACGIH (G) American Conference of Governmental Industrial Hygienists.

- A1 - Confirmed human carcinogen.
- A2 - Suspected human carcinogen.
- A3 - Animal carcinogen.
- A4 - Not classifiable as a human carcinogen.
- A5 - Not suspected as a human carcinogen.

IARC (I) International Agency for Research on Cancer.

- 1 - The agent (mixture) is carcinogenic to humans.
- 2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.
- 2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.
- 3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.
- 4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

NTP (N) National Toxicology Program.

- 1 - Known to be carcinogens.
- 2 - Reasonably anticipated to be carcinogens.

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 the user's own particular use.

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