

SAFETY DATA SHEET



1. IDENTIFICATION

1.1. PRODUCT IDENTIFIER USED ON LABEL:

1.1.1. ECHO RED ARMOR

1.2. OTHER MEANS OF IDENTIFICATION:

1.2.1. Part Numbers:

6550001	6550050	6550005
6550025	6550250	6552750

1.3. RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE;

1.3.1. PETROLEUM LUBRICATING OIL

1.3.2. NO OTHER USES RECOMMENDED

1.4. NAME, ADDRESS, AND TELEPHONE NUMBER OF THE CHEMICAL MANUFACTURER, IMPORTER, OR OTHER RESPONSIBLE PARTY:

1.4.1.

Spectrum Lubricants Corporation

500 Industrial Park Drive
Selmer, TN 38375-3276
United States of America

Product Information

MSDS Requests: (800) 264-6457 or +17316454972

Technical Information: (800) 264-6457 or +17316454972

General Information: vswedley@spectrumcorporation.com

1.5. EMERGENCY PHONE NUMBER:

1.5.1.

Emergency Response

North America: CHEMTREC (800) 424-9300 after 5:00pm CST Or (703) 527-3887

Health Emergency

USA: (800) 264-6457 or +17316454972

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2. HAZARD(S) IDENTIFICATION

2.1. CLASSIFICATION OF THE CHEMICAL IN ACCORDANCE WITH PARAGRAPH (d) of §1910.1200;

2.1.1.



R36	IRRITATING TO EYES
R38	IRRITATING TO SKIN
R43	May cause sensitization by skin contact
R65	Harmful: may cause lung damage if swallowed.
R51/53:	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R52	Harmful to aquatic organisms

2.2. Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200

- 2.2.1. Inhalation: Inhalation of fumes may result in dizziness, headache and respiratory irritation.
- 2.2.2. Eye Contact: Contact with eyes may cause minimal irritation.
- 2.2.3. Skin Contact: Mild irritation may occur with prolonged or repeated contact.
- 2.2.4. Ingestion: Slightly toxic. Pulmonary aspiration hazard if vomiting occurs.

2.3. Hazards not otherwise classified that have been identified during the classification process;

- 2.3.1. TLV: 5mg/m3 as mist. ACGIH 1984-85.
- 2.3.2. Chronic Effects: Ingredients of this product are not listed as potential carcinogens in N.T.P. Annual Report on Carcinogens, I.A.R.C. Monographs, or by O.S.H.A. HCS (g) (2) (vii).

3. Composition/ information on ingredients

3.1. The chemical name and concentration (exact percentage) or concentration ranges of all ingredients which are classified as health hazards in accordance with paragraph (d) of §1910.1200

3.1.1.

COMPONENTS	CAS Number	EU Number	Concentration (%)	R - Phrase
Polybutene	9003-29-6	NA	15 – 40	**
Proprietary ester	Proprietary	NA	10-30	**
Distillates (petroleum), hydrotreated light	64742-47-8	265-149-8	10-30	R65
Highly-refined petroleum lubricant oils	Various	Various	10-30	R65
Hydrocarbyl amine	Proprietary	Polymer	7 – 13	R52
alkyl imidazoline	Proprietary	NA	1 – 5	R53
Alkarylamine	Proprietary	NA	<2	R51/53
Solvent naphtha, petroleum, heavy	64742-94-5	NA	<2	R65

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aromatic				
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- * The classification as a carcinogen need not apply the substance contains less than 3 %DMSO extract as measured by IP 346
- ** This substance is not listed in a priority list (as foreseen under Council Regulation (EEC) No 793/93 on the evaluation and control of the risks of existing substances.).

4. FIRST AID MEASURES

4.1.

Skin:	Wash skin with soap and warm water. Wash clothing before re-use.
Eye:	If splashed into eyes flush eyes with clear water for five (5) minutes.
Inhalation:	If overcome by fumes remove from exposure immediately.
Ingestion:	If ingested, do not induce vomiting. Call a physician.

5. FIRE FIGHTING MEASURES

5.1. PROTECTION OF FIRE FIGHTERS:

5.1.1. Fire Fighting Instructions:

5.1.2. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self contained breathing apparatus.

5.2. Extinguishing Media:

5.2.1. Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

5.3. Special Firefighting Procedures:

5.3.1. Cool exposed containers with water spray.

5.4. Unusual Fire and Explosion Hazards:

5.4.1. Pressure increase in over heated closed containers. Cool containers with water spray.

6. ACCIDENTAL RELEASE MEASURES

6.1. Spill Procedures:

6.1.1. Remove ignition sources. Recover Liquid. Add absorbent to spill area. Ventilate confined spaces. Advise authorities if product enters sewers, etc.

6.2. Waste Disposal:

6.2.1. Assure conformity with applicable disposal regulations. Dispose of absorbed material at approved waste site

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6.3. Precautionary Measures:

- 6.3.1. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Wash thoroughly after handling.
- 6.3.2. Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

7. HANDLING AND STORAGE

7.1. HANDLING

- 7.1.1. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

7.2. STORAGE

- 7.2.1. Keep container closed when not in use. Do not store with strong oxidizing agents. Do not store at elevated temperatures.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1. EXPOSURE LIMIT:

- 8.1.1. OSHA – 5mg/m³ mist

8.2. Ventilation Procedure:

- 8.2.1. Ventilate as needed to comply with exposure limit

8.3. Eye Protection:

- 8.3.1. Use goggles/face shield to avoid eye contact

8.4. Work/Hygienic Practices:

- 8.4.1. If clothing becomes contaminated, change to fresh clean clothing. Do not wear until thoroughly laundered

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1.

9.1.1. Vapor Pressure (mmHg) at 20°C:	<1
9.1.2. Specific Gravity at 60°F:	0.88
9.1.3. Water Solubility:	Negligible

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9.1.4. Boiling Point:	Not determined
9.1.5. Vapor Density (Air=1):	>1
9.1.6. Evaporation Rate (BUAC=1):	<1
9.1.7. Odor:	Mild Petroleum Odor
9.1.8. Appearance:	Dark Red Colored Liquid
9.1.9. Viscosity at 100°C(Typical):	10.3 cSt (10.3 mm ² /s)
9.1.10. Viscosity at 40°C(Typical):	64 cSt (64 mm ² /s)
9.1.11. V.O.C.	170 – 190 g/L
9.1.12. Flash Point:	163°F / 73°C
9.1.13. Fire Point	Not determined

10. STABILITY AND REACTIVITY

- 10.1. **Stability:**
 - 10.1.1. Stable
- 10.2. **Incompatibility:**
 - 10.2.1. Avoid strong oxidants
- 10.3. **Polymerization:**
 - 10.3.1. Will not occur
- 10.4. **Thermal Decomposition:**
 - 10.4.1. Partial burning produces fumes, smoke and carbon monoxide

11. TOXICOLOGY INFORMATION

- 11.1. **Distillates (petroleum), hydrotreated light**
 - 11.1.1. ORAL (LD50): Acute: >5000 mg/kg [Rat].
 - 11.1.2. DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].
 - 11.1.2.1. Studies on laboratory animals have associated similar materials with eye and respiratory tract irritation. Repeated exposure to elevated concentrations of hydrocarbon solvents can produce a variety of transient CNS effects (e.g., dizziness, headache, narcosis, etc). Studies on laboratory animals have shown similar materials to cause skin irritation after repeated or prolonged contact. Repeated direct application of similar materials to the skin can produce defatting dermatitis and kidney damage in laboratory animals. The most common effects observed in repeated dose animal studies with mineral spirits are kidney changes that are consistent with an alpha 2u-globulin-mediated process that is not regarded as relevant to humans. Certain studies have reported effects

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in the liver as well as hematological or urine chemistry changes. In general, these effects have not to been shown to be dose-related.

11.2. Highly-refined petroleum lubricant oils:

11.2.1. ORAL (LD50): Acute: >5000 mg/kg [Rat].

11.2.2. DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].

11.2.2.1. Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects. In long term studies (up to two years) no carcinogenic effects have been reported in any animal species tested.

12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity

12.1.1. An environmental fate analysis is not available for this specific product. Plants and animals may experience harmful or fatal effects when coated with petroleum products. Petroleum-based (mineral) lubricating oils normally will float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway may be sufficient to cause a fish kill or create an anaerobic environment.

12.2. Environmental Fate

12.2.1. Analysis for ecological effects has not been conducted on this product. However, if spilled, this product and any contaminated soil or water may be harmful to human, animal, and aquatic life. Also, the coating action associated with petroleum and petroleum products can be harmful or fatal to aquatic life and waterfowl.

13. DISPOSAL CONSIDERATIONS

13.1. Waste Disposal:

13.1.1. Assure conformity with applicable disposal regulations. Dispose of absorbed material at approved waste site.

14. TRANSPORTATION INFORMATION

The shipping description below may not represent requirements for all modes of transportation, shipping methods or locations outside of the United States.

14.1. ROAD AND RAIL

14.1.1. DOT: A U.S. Department of Transportation regulated material.

14.1.2. UN1268, Petroleum Distillates, n.o.s., Combustible Liquid

14.1.3. [This product has a flash point temperature between 60.5° to 93°C (141° and 200°F). Bulk shipments of this product are regulated.]

14.2. VESSEL

14.2.1. IMDG: NOT REGULATED

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- 14.3. AIR
 - 14.3.1. IATA: NOT REGULATED

15.REGULATORY INFORMATION

- 15.1. TSCA Inventory
 - 15.1.1. This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.
- 15.2. SARA 302/304 Emergency Planning and Notification
 - 15.2.1. The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.
- 15.3. SARA 311/312 Hazard Identification
 - 15.3.1. The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories: Fire, Acute (Immediate) Health Hazard, Chronic (Delayed) Health Hazard
- 15.4. SARA 313 Toxic Chemical Notification and Release Reporting
 - 15.4.1. This product contains the following components in concentrations above *de minimis* levels that are listed as toxic chemicals in 40 CFR Part 372 pursuant to the requirements of Section 313 of SARA: No components were identified.
- 15.5. CERCLA
 - 15.5.1. The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are: No components were identified
- 15.6. Clean Water Act (CWA)
 - 15.6.1. This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.
- 15.7. California Proposition 65:
 - 15.7.1. This material may components which are known to the State of California to cause cancer, birth defects or other reproductive harm, and may be subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):
- 15.8. New Jersey Right-to-Know Label
 - 15.8.1. Two Cycle Engine Oil.

16.OTHER INFORMATION

- 16.1.

HAZARD RANKINGS			
HMIS		NFPA	

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HEALTH HAZARD	1	HEALTH HAZARD	1
FIRE HAZARD	1	FIRE HAZARD	1
PHYSICAL HAZARD	0	INSTABILITY/REACTIVITY	0
PERSONAL PROTECTION	B		

16.2. **Date of preparation:** 04/01/2013

16.3. **MANUFACTURER DISCLAIMER:**

16.3.1. *The data presented herein is based upon tests and information, which we believe to be reliable.
However, users should make their own investigations to determine the suitability of the information for
their particular purpose*