1. IDENTIFICATION

1.1. PRODUCT IDENTIFIER USED ON LABEL:

<table>
<thead>
<tr>
<th>Finished Product Item Number</th>
<th>Customer Item Number</th>
<th>LABEL DESCRIPTION ACTUAL</th>
<th>BRAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM5802EE</td>
<td></td>
<td>ECHO POWERBLEND X EXTENDED LIFE OIL</td>
<td>ECHO</td>
</tr>
<tr>
<td>SMGR33EC</td>
<td>6450005</td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SMGR01EC</td>
<td>6450025</td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SMGR07EC</td>
<td>6450002</td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SM5101EC</td>
<td>X6972270101/99988800086</td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SM5905EC</td>
<td>6450250</td>
<td>ECHO BAR &amp; CHAIN OIL</td>
<td>ECHO</td>
</tr>
<tr>
<td>SM5818ER</td>
<td>6450114</td>
<td>ECHO POWER BLEND X HIGH PERFORMANCE 2 STROKE ENGINE</td>
<td>ECHO</td>
</tr>
<tr>
<td>SM5818EG</td>
<td>6450103</td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SM5238EC</td>
<td>999888000088</td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SM5218EC</td>
<td>X6972270201/99988800085</td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SMGR25EC</td>
<td>X6974100202</td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SMGR02EC</td>
<td>6450001</td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SMGR29EC</td>
<td>6450000</td>
<td>ECHO POWERBLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SM5818EE</td>
<td>6450102</td>
<td>ECHO POWER BLEND X LOW SMOKE</td>
<td>ECHO</td>
</tr>
<tr>
<td>SM5818EC</td>
<td>6450100/6450099</td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SM5818EM</td>
<td>6450060</td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SMGR34EE</td>
<td></td>
<td>ECHO POWERBLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SM5906EC</td>
<td>6450050</td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SM5906EM</td>
<td>6450062</td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SM5943EE</td>
<td>6450116</td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SMGR33EK</td>
<td>6450118</td>
<td>ECHO POWERBLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SMGR34ER</td>
<td>6450109</td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SM5926EC</td>
<td>6450006</td>
<td>ECHO POWERBLEND X XTENDED LIFE OIL</td>
<td>ECHO</td>
</tr>
<tr>
<td>SMGR34EE</td>
<td></td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SMGR34EC</td>
<td>6450108</td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SMGR12EC</td>
<td>999888000089</td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SMGR34EK</td>
<td>6450119</td>
<td>ECHO POWERBLEND X</td>
<td>ECHO</td>
</tr>
<tr>
<td>SM5834EM</td>
<td>6450061</td>
<td>ECHO POWER BLEND X</td>
<td>ECHO</td>
</tr>
</tbody>
</table>
1.2. RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE;
   1.2.1. PETROLEUM LUBRICATING OIL
   1.2.2. NO OTHER USES RECOMMENDED

1.3. NAME, ADDRESS, AND TELEPHONE NUMBER OF THE CHEMICAL MANUFACTURER, IMPORTER, OR OTHER RESPONSIBLE PARTY:
   1.3.1.

   **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

1.4. EMERGENCY PHONE NUMBER:
   1.4.1.

   **Emergency Response**
   North America: CHEMTREC (800) 424-9300 after 5:00pm CST  Or +17035273887
   **Health Emergency**
   USA: (800) 264-6457 or +17316454972
2. HAZARD(S) IDENTIFICATION

2.1. CLASSIFICATION OF THE CHEMICAL IN ACCORDANCE WITH PARAGRAPH (d) of §1910.1200:
   2.1.1. Acute Inhalation Category 4
   2.1.2. Eye Irritant Category 2
   2.1.3. Skin Corrosion/Irritation Category 2
   2.1.4. Flammable Liquid Category 4

2.2. Signal Word:
   2.2.1. Warning

2.3. Symbol:

2.4. Hazard Statements:
   2.4.1. Harmful if Inhaled
   2.4.2. Causes serious eye irritation
   2.4.3. Causes skin irritation
   2.4.4. Combustible Liquid

2.5. Precautionary Statements:
   2.5.1. Prevention:
      2.5.1.1. Avoid breathing mist or spray.
      2.5.1.2. Use only outdoors or in a well-ventilated area.
      2.5.1.3. Wear eye/face protection
      2.5.1.4. Wear protective gloves
      2.5.1.5. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
   2.5.2. Response:
      2.5.2.1. If inhaled: Remove person to fresh air and keep comfortable for breathing.
      2.5.2.2. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists get medical advice/attention.
      2.5.2.3. If on skin: wash with plenty of water, if irritation or rash occurs get medical advice/attention. Take off contaminated clothing and wash it before reuse.
      2.5.2.4. Call a poison center/doctor if you feel unwell.
      2.5.2.5. In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.
   2.5.3. Storage:
      2.5.3.1. Store in well-ventilated place.
   2.5.4. Disposal:
      2.5.4.1. Dispose of contents/container in accordance with local/regional/national/international regulations.

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.

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>CAS Number</th>
<th>EU Number</th>
<th>Concentration (%)</th>
<th>Hazard Statements (see Section 16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>64742-47-8</td>
<td>265-149-8</td>
<td>10-30</td>
<td>H226, H304, H315,</td>
</tr>
<tr>
<td>Solvent-dewaxed heavy paraffinic distillates</td>
<td>64742-65-0</td>
<td>265-169-7</td>
<td>40-50</td>
<td>H315, H332</td>
</tr>
<tr>
<td>Polyiosbutylene</td>
<td>9003-29-6</td>
<td>Not available</td>
<td>40-70</td>
<td>H315, H319, H332</td>
</tr>
</tbody>
</table>

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 several minutes. |
| Inhalation:                    | Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell |
| Ingestion:                     | If ingested, do not induce vomiting. Call a physician. |

5. FIRE FIGHTING MEASURES

5.1. Flash Point: 176°F (80°C)

5.2. Protective Equipment/Fire Fighting Instructions:

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

5.3. Extinguishing Media:

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

5.4. Special Firefighting Procedures:

5.4.1. Cool exposed containers with water spray.

5.5. Unusual Fire and Explosion Hazards:

5.5.1. 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

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 re-conditioner 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. Component Exposure Limits:
   8.1.1. SYNTHETIC ENGINE OIL 5mg/m3 (oil mist) ACGIH TLV OSHA PEL

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>5mg/m³ (oil mist) TWA</td>
<td>5mg/m³ (oil mist) TWA</td>
</tr>
<tr>
<td>Solvent-dewaxed heavy paraffinic distillates</td>
<td>5mg/m³ (oil mist) TWA</td>
<td>5mg/m³ (oil mist) TWA</td>
</tr>
<tr>
<td>Polyisobutylene</td>
<td>5mg/m³ (oil mist) TWA</td>
<td>5mg/m³ (oil mist) TWA</td>
</tr>
</tbody>
</table>

8.2. Engineering Controls:
   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. **Glove Protection:**
8.4.1. Use impervious gloves to avoid repeated/prolonged skin contact.

8.5. **Work/Hygienic Practices:**
8.5.1. If clothing becomes contaminated, change to fresh clean clothing. Do not wear until thoroughly laundered.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

9.1. **Appearance/Odor:** Green colored liquid with mild hydrocarbon odor.
9.2. **Odor Threshold:** No data available
9.3. **pH:** No data available
9.4. **Boiling Point:** Wide range
9.5. **Melting Point:** No data available
9.6. **Solubility (H₂O):** Negligible
9.7. **Specific Gravity:** 0.8707 @ 15.6°C
9.8. **Density:** 7.251 lbs/gal
9.9. **Octanol/H₂O Coeff.:** No data available
9.10. **Evaporation Rate (BUAC=1):** <1
9.11. **Molecular Weight:** No data available
9.12. **Decomposition Temp:** No data available
9.13. **Auto Ignition:** No data available
9.14. **Lower Flammability Limit:** No data available
9.15. **Flash Point:** 176°F (80°C)
9.16. **Upper Flammability Limit:** No data available
9.17. **Vapor Density (Air=1):** >1
9.18. **Vapor Pressure:** <1mmHg @ 20°C
9.19. **VOC:** 135g/L
9.20. **Flammability Class:** Combustible liquid
9.21. **Viscosity @ 40°C** 77cSt (77 mm²/s)
9.22. **Viscosity @ 100°C** 10.4cSt (10.4 mm²/s)

10. **STABILITY AND REACTIVITY**

10.1. **Reactivity:**
10.1.1. Material does not pose a significant reactivity hazard.
10.2. **Chemical Stability:**
10.2.1. Stable
10.3. **Incompatibility/Conditions to avoid:**
10.3.1. Avoid strong oxidants
10.4. **Possibility of Hazardous Reactions:**
10.4.1. Will not undergo hazardous polymerization.

10.5. **Hazardous Decomposition Products:**
10.5.1. Partial burning produces fumes, smoke and carbon monoxide

### 11. TOXICOLOGY INFORMATION

11.1. **Likely Routes of Exposure:**
11.1.1. Ingestion, Inhalation, Eye contact, Skin contact.

11.2. **Acute Effects:**
11.2.1. Inhalation: Harmful if inhaled. May cause respiratory irritation.
11.2.2. Eye Contact: Causes serious eye irritation.
11.2.3. Skin Contact: Causes Skin irritation.
11.2.4. Ingestion: Expected to be low ingestion hazard.

11.3. **Component Data/ Analysis**

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>Oral (LD50) (Rat)</th>
<th>Inhalation (LC50) (Rat)</th>
<th>Dermal (LD50) (Rabbit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>&gt;5000 mg/kg</td>
<td>2.18 mg/l (4hr)</td>
<td>&gt;2000 mg/kg</td>
</tr>
<tr>
<td>Solvent-dewaxed heavy paraffinic distillates</td>
<td>&gt;5000 mg/kg</td>
<td>2.18 mg/l (4hr)</td>
<td>&gt;2000 mg/kg</td>
</tr>
<tr>
<td>Polyisobutylene</td>
<td>&gt;5000 mg/kg</td>
<td>5.53 mg/l (4hr)</td>
<td>&gt;2000 mg/kg</td>
</tr>
</tbody>
</table>

11.4. **Sensitization:**
11.4.1. None known.

11.5. **Carcinogenicity:**
11.5.1. None greater than 0.1%.

11.6. **Mutagenicity:**
11.6.1. None known.

11.7. **Reproductive Toxicity:**
11.7.1. None known.

11.8. **Teratogenicity:**
11.8.1. None known.

### 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: NOT REGULATED

14.2. VESSEL
   14.2.1. IMDG: NOT REGULATED

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. No components were identified.

15.3. SARA 311/312 Hazard Identification
   15.3.1. Acute (Immediate) Health Hazard

15.4. SARA 313 Toxic Chemical Notification and Release Reporting
   15.4.1. No components were identified.

15.5. CERCLA
   15.5.1. 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. The product does not contain chemicals known to the state of California to cause cancer, birth defects, or any other reproductive harm.

15.8. New Jersey Right-to-Know Label
   15.8.1. Petroleum Oil

16. OTHER INFORMATION

16.1.
HAZARD RANKINGS

<table>
<thead>
<tr>
<th>HMIS</th>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH HAZARD</td>
<td>HEALTH HAZARD</td>
</tr>
<tr>
<td>FIRE HAZARD</td>
<td>FIRE HAZARD</td>
</tr>
<tr>
<td>PHYSICAL HAZARD</td>
<td>INSTABILITY/REACTIVITY</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>B</td>
</tr>
</tbody>
</table>

Components Hazard Statements

- H226 Flammable liquid and vapor.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled

16.2. **Date of preparation:** 12/18/2013

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.*