SAFETY DATA SHEET

Data: June 2015

Section #1: PRODUCT AND COMPANY IDENTIFICATION

Lapmaster Wolters, LLC
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Mt. Prospect, IL 60056

Telephone: (224) 665-7101 (Office Hours 8:00 a.m. to 5:30 p.m. CST)
Emergency Phone: 24 Hours/Day... Chemtrec @ 1-800-424-9300

Product Identification: METS Red Lubricant Series 4430
Product Name: Lubricant Formulation METS-LUBE-RED-XXXX

2. Hazards Identification

Acute Toxicity: Oral, Category 4
Acute Toxicity: Oral, Category 3
Acute Toxicity: Inhalation, Category 3
Acute Toxicity: Skin, Category 3
Specific Target Organ Toxicity (single exposure), Category 1

GHS Signal Word: Danger
GHS Hazard Phrases:
H301 - Toxic if swallowed.
H302 - Harmful if swallowed.
H311 - Toxic in contact with skin.
H331 - Toxic if inhaled.
H370 - Causes damage to organs

GHS Precaution Phrases:
P235+410 - Keep cool and protect from sunlight.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases:
P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P302+352 - IF ON SKIN: Wash with plenty of soap and water.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P307+311 - IF exposed: Call a POISON CENTER or doctor/physician.
P311 - Call a POISON CENTER or doctor/physician.
P330 - Rinse mouth.
P361 - Remove/Take off immediately all contaminated clothing.
P363 - Wash contaminated clothing before reuse.

GHS Storage and Disposal Phrases:
P405 - Store locked up.
P420 - Store away from other materials.
P501 - Dispose of contents/container to...
Potential Health Effects (Acute and Chronic):

- Hazards not otherwise classified (HNOC) or not covered by GHS.
- Repeated excessive exposure to ethylene glycol may cause irritation of the upper respiratory tract. In humans, effects have been reported on the central nervous system, including nystagmus (involuntary, rapid, rhythmic movement of the eyeball).
- May cause kidney injury.

Inhalation:

- If ethylene glycol is heated or misted in work areas that are poorly ventilated, vapor/mist may accumulate and cause respiratory irritation and symptoms such as headache and nausea. Material has a very low vapor pressure at room temperature, so inhalation exposures are not expected unless material is heated or misted. No hazard expected in normal industrial use.

Skin Contact:

- Low hazard for normal industrial handling. A single prolonged skin exposure is not likely to result in the material being absorbed in harmful amounts.

Eye Contact:

- May cause moderate eye irritation.

Ingestion:

- The lethal dose in adult humans for ethylene glycol is about 100 ml (1/3 cup). Swallowing may cause nausea, vomiting or diarrhea. Excessive exposure may cause CNS effects, cardiopulmonary effects (metabolic acidosis), and kidney failure. Toxicity follows 3-stage progression. (1) involves central nervous system effects including paralysis of eye muscles, convulsions, and coma. Metabolic acidosis and cerebral swelling may also occur. (2) involves cardiopulmonary system with symptoms of hypertension, rapid heart beat, and possible cardiac failure. (3) involves severe kidney abnormalities including

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>107-21-1</td>
<td>Ethylene glycol</td>
<td>60.0-85.0 %</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>20.0 -30.0 %</td>
</tr>
<tr>
<td>67-56-1</td>
<td>Methanol</td>
<td>3.0 -7.0 %</td>
</tr>
</tbody>
</table>

4. First Aid Measures

Emergency and First Aid Procedures:

- Consult a physician. Show this safety data sheet to the doctor in attendance.

In Case of Inhalation:

- If inhaled, remove to fresh air. If breathing is difficult, give oxygen. Get medical aid. If breathed in, move person into fresh air. Consult a physician.

In Case of Skin Contact:

- In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse. No specific treatment is necessary, since this material is not likely to be hazardous. Wash off with soap and plenty of water. Consult a physician.

In Case of Eye Contact:

- In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid. No specific treatment is necessary, since this material is not likely to be hazardous. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

In Case of Ingestion:

- Never give anything by mouth to an unconscious person. Get medical aid. No specific treatment is necessary, since this material is expected to be non-hazardous. Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Signs and Symptoms Of Exposure:

- The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Note to Physician:

- Treat symptomatically and supportively.
5. Fire Fighting Measures

Flash Pt: 
Explosive Limits: LEL: UEL: 
Autoignition Pt: 
Suitable Extinguishing Media: Not available. Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.

Fire Fighting Instructions: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Material will not burn. Wear self contained breathing apparatus for fire fighting if necessary.

Further information:

Flammable Properties and Hazards: No data available.

6. Accidental Release Measures

Protective Precautions, Protective Equipment and Emergency Procedures: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Steps To Be Taken In Case Material Is Released Or Spilled: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

7. Handling and Storage

Precautions To Be Taken in Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid breathing spray or mist. No special handling procedures are required. Avoid contact with skin and eyes. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.

Precautions To Be Taken in Storing: Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture. No special storage requirements. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature: -20 - 8 deg.C.

8. Exposure Controls/Personal Protection

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Partial Chemical Name</th>
<th>OSHA TWA</th>
<th>ACGIH TWA</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>107-21-1</td>
<td>Ethylene glycol</td>
<td></td>
<td>CEIL: 100 mg/m3 (H)</td>
<td></td>
</tr>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>67-56-1</td>
<td>Methanol</td>
<td>PEL: 200 ppm</td>
<td>TLV: 200 ppm</td>
<td>STEL: 250 ppm</td>
</tr>
</tbody>
</table>
Respiratory Equipment (Specify Type):
Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Respirator protection is not normally required. Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Eye Protection:
Wear chemical splash goggles. Eye protection is not normally required. Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Protective Gloves:
Glove protection is not normally required. Protective garments not normally required. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Other Protective Clothing:
Protective garments not normally required. Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Engineering Controls (Ventilation etc.):
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. There are no special ventilation requirements.

Work/Hygienic/Maintenance Practices:
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Environmental Exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical States:</th>
<th>[ ] Gas</th>
<th>[X] Liquid</th>
<th>[ ] Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance and Odor:</td>
<td>Solution.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>sweetish odor.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Melting Point:       |              |
| Boiling Point:       |              |
| Flash Pt:            |              |
| Evaporation Rate:    |              |
| Flammability (solid, gas): |          |
| Explosive Limits:    | LEL:          | UEL:         |
| Vapor Pressure (vs. Air or mm Hg): |          |
| Vapor Density (vs. Air = 1): |          |
| Specific Gravity (Water = 1): |          |
| Density:             | ~ 1.092 G/CM3|
| Solubility in Water: |              |
| Percent Volatile:    |              |
| Autoignition Pt:     |              |
10. Stability and Reactivity

| Reactivity: | No data available. |
| Stability: | Unstable [ ] Stable [ X ] |
| Conditions To Avoid - Instability: | Moisture, Heat, flames and sparks. Extremes of temperature and direct sunlight. |
| Incompatibility - Materials To Avoid: | Strong oxidizing agents, isocyanates, aliphatic amines, caustics, None. acids, Bases, Alkali metals. |
| Hazardous Decomposition or Byproducts: | Carbon monoxide, None. Other decomposition products: No data available. In the event of fire: see section 5. |
| Possibility of Hazardous Reactions: | Will occur [ ] Will not occur [ X ] |
| Conditions To Avoid - Hazardous Reactions: | No data available. |

11. Toxicological Information

| Toxicological Information: | Epidemiology: No data available. Teratogenicity: No data available. Reproductive Effects: Neurotoxicity: Other Studies: Reproductive toxicity. Aspiration hazard: |
| Irritation or Corrosion: | Skin corrosion/irritation. No data available. Serious eye damage/eye irritation: |
| Sensitization: | No data available. |
| Chronic Toxicological Effects: | Specific target organ toxicity - single exposure: No data available. Specific target organ toxicity - repeated exposure: |
| Carcinogenicity/Other Information: | CAS# 107-21-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |
| Carcinogenicity: | NTP? No IARC Monographs? No OSHA Regulated? No |

12. Ecological Information

| Results of PBT and vPvB assessment: | PBT/vPvB assessment not available as chemical safety assessment not required/not conducted. |
| Persistence and Degradability: | No data available. |
| Bioaccumulative Potential: | No data available. |
| Mobility in Soil: | No data available. |

13. Disposal Considerations

| Waste Disposal Method: | Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. RCRA P-Series: None listed. RCRA U-Series: None listed. Product: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. |

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14. Transport Information

LAND TRANSPORT (US DOT):
DOT Proper Shipping Name: 
DOT Hazard Class: 9 CLASS 9
UN/NA Number: Packing Group: III

LAND TRANSPORT (Canadian TDG):
TDG Shipping Name: Not Regulated. No information available.

15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>S. 302 (EHS)</th>
<th>S. 304 RQ</th>
<th>S. 313 (TRI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>107-21-1</td>
<td>Ethylene glycol</td>
<td>No</td>
<td>Yes 5000 LB</td>
<td>Yes</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>67-56-1</td>
<td>Methanol</td>
<td>No</td>
<td>Yes 5000 LB</td>
<td>Yes</td>
</tr>
</tbody>
</table>

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections:
[X] Yes [ ] No Acute (immediate) Health Hazard
[X] Yes [X] No Chronic (delayed) Health Hazard
[X] Yes [X] No Fire Hazard
[X] Yes [X] No Sudden Release of Pressure Hazard
[ ] Yes [ ] No Reactive Hazard

16. Other Information

Revision Date: 05/20/2015

Hazard Rating System:

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