MATERIAL SAFETY DATA SHEET
in accordance with 1907/2006/EC

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product Name: 613 Moly Grease
Date of Preparation: 5 July 2007
MSDS No. 154-9

Not classified as hazardous according to criteria of Worksafe Australia.

Company:
A.W. CHESTERTON COMPANY
860 Salem Street
Groveland, MA 01834-1507, USA
Tel.: +1 978-469-6446 Fax: +1 978-469-6785
(Mon. - Fri. 8:30 - 5:00 PM EST)
E-mail (questions): ProductMSDSs@chesterton.com
MSDS requests: www.chesterton.com

Supplier:

For Chemical Emergency:
24 hours per day, 7 days per week
Call Infotrac: 1-800-535-5053
Outside N. America: +1 352-323-3500 (collect)

Use: Multi-purpose extreme pressure grease with Molybdenum Disulfide. Petroleum base/Synthetic lubricant.

2. HAZARDS IDENTIFICATION

Direct contact may cause skin and eye irritation. As with any similar product, if swallowed in large quantities, this product could be harmful or fatal.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients

<table>
<thead>
<tr>
<th>% Wt.</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>Symbol</th>
<th>R-phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseoil – unspecified*</td>
<td>65-100</td>
<td>*</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Lithium 12-Hydroxystearate</td>
<td>1-25</td>
<td>7620-77-1</td>
<td>231-536-5</td>
<td>—</td>
</tr>
<tr>
<td>Molybdenum Sulfide</td>
<td>1-5</td>
<td>1317-33-5</td>
<td>215-263-9</td>
<td>—</td>
</tr>
<tr>
<td>Zinc Dialkyl Dithiophosphate</td>
<td>1-4</td>
<td>68649-42-3</td>
<td>272-028-3</td>
<td>—</td>
</tr>
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</table>

*CAS No. 64741-88-4, 64741-89-5, 64741-96-4, 64741-97-5, 64742-01-4, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-57-0, 64742-62-7, 64742-65-0, 72623-83-7: Contains less than 3 % DMSO extract as measured by IP 346.

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If not breathing, administer artificial respiration. Contact physician.

Skin Contact: Wash skin with soap and water. Contact physician if irritation persists.

Eye Contact: Flush eyes for at least 15 minutes with large amounts of water. Contact physician if irritation persists.

Ingestion: If conscious, drink large quantities of water. Contact physician immediately.

Injection: Contact physician immediately. Transport immediately for medical treatment. Treat injection as a medical emergency. Delay may cause loss of affected part of the body.

Advice to Physician: Treat symptoms.
5. FIRE-FIGHTING MEASURES

Extinguishing Methods: Carbon Dioxide, dry chemical, foam or water spray
Unusual Fire and Explosion Hazards: Water may cause frothing.
Special Fire Fighting Measures: Cool exposed containers with water. Recommend Firefighters wear self-contained breathing apparatus.
Flammability Classification: not determined
HAZCHEM Emergency Action Code: 2 Z

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Utilize exposure controls and personal protection as specified in Section 8.
Environmental Precautions: Keep out of sewers, streams and waterways.
Methods of Clean Up: Contain spill to a small area. Pick up with absorbent material (sand, sawdust, clay, etc.) and place in a suitable container for disposal.

7. HANDLING AND STORAGE

Handling: Wash before eating, drinking or smoking. Utilize exposure controls and personal protection as specified in Section 8.
Storage: Store in a cool, dry area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Hazardous Ingredients</th>
<th>OSHA ppm</th>
<th>ACGIH TLV ppm</th>
<th>AUS TRALIA ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil Mist, Mineral</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Lithium 12-Hydroxystearate</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Molybdenum Sulfide</td>
<td>– 15</td>
<td>– 10</td>
<td>– 10</td>
</tr>
<tr>
<td>Zinc Dialkyl Dithiophosphate</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

Respiratory Protection: Not normally needed. If exposure limits are exceeded, use an approved organic vapor respirator for mists.
Ventilation: No special requirements. If vapors or mists are produced, provide adequate ventilation.
Protective Gloves: Chemical resistant gloves
Eye Protection: Safety glasses
Other: Remove and wash contaminated clothing immediately.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Colour</th>
<th>Initial boiling point</th>
<th>Melting point</th>
<th>% Volatile (by volume)</th>
<th>Flash point</th>
<th>Method</th>
<th>Viscosity</th>
<th>Autoignition temp.</th>
<th>Explosion limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>liquid</td>
<td>dark gray</td>
<td>not applicable</td>
<td>not determined</td>
<td>negligible</td>
<td>not determined</td>
<td>–</td>
<td>not determined</td>
<td>not determined</td>
<td>not determined</td>
</tr>
</tbody>
</table>

Odour: odorless
Vapour pressure @ 20°C: < 0.1 mm Hg
% Aromatics by weight: 0
pH: not applicable
Density: 0.895 kg/l
Weight per volume: 7.45 lbs/gal.
Coefficient (water/oil): < 1
Vapour density (air=1): > 1
Rate of evaporation (ether=1): < 1
Solubility in water: negligible
Other: none
10. STABILITY AND REACTIVITY

Stability: Stable
Hazardous Polymerization: Will not occur.
Hazardous Decomposition Products:
Carbon Monoxide, Carbon Dioxide, Hydrogen Sulfide and other toxic fumes.
Hydrogen Sulfide
Conditions to Avoid: Open flames and red hot surfaces.
Materials to Avoid: Strong oxidizers like liquid Chlorine and concentrated Oxygen.

11. TOXICOLOGICAL INFORMATION

Primary Route of Exposure Under Normal Use:
Inhalation, skin and eye contact. Personnel with pre-existing dermatitis are generally aggravated by exposure.

Acute Effects:
Direct contact may cause skin and eye irritation. Vapor or mist may cause slight respiratory irritation.

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

Other Information:
As per 29 CFR 1910.1200 (Hazard Communication), this product contains no carcinogens as listed in the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC) or the Occupational Safety and Health Administration (OSHA).

12. ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. The information given below is based on a knowledge of the components and the ecotoxicology of similar substances.

Mobility: Liquid. Solubility in water: negligible. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9).

Degradability: Mineral Oil: not readily biodegradable.

Accumulation: Mineral Oil: not expected to bioaccumulate.

Ecotoxicity: Oil products, improperly released to the environment, can cause ground and water pollution.

13. DISPOSAL CONSIDERATIONS

Stabilization and solidification may be necessary prior to land disposal. Material is suitable for fuels blending or incineration. Check local, state and national/federal regulations and comply with the most stringent requirement.

EWC-code: 13 02 05

14. TRANSPORT INFORMATION

TDG: NONHAZARDOUS, NOT REGULATED
IMDG: NONHAZARDOUS, NOT REGULATED
IATA/ICAO: NONHAZARDOUS, NOT REGULATED
ADR/RID: NONHAZARDOUS, NOT REGULATED

U.S. DOT:
Shipping Name: NONHAZARDOUS
Hazard Class: NOT REGULATED
UN/NA #: NOT APPLICABLE
Packaging Group # NOT APPLICABLE
Emergency Response Guide Book No. - NOT APPLICABLE
**Product:** 613 Moly Grease  

**Date:** 5 July 2007  

**MSDS No.:** 154-9

### 15. REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>Classification</th>
<th>Name of the substances on the label</th>
<th>Other information</th>
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<td>none</td>
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<tr>
<td>R-Phrase(s)</td>
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<td>none</td>
</tr>
<tr>
<td>S-Phrase(s)</td>
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<td>none</td>
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<tr>
<td>Label</td>
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### 16. OTHER INFORMATION

#### US EPA SARA TITLE III

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Chemicals</th>
<th>Concentration</th>
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</thead>
<tbody>
<tr>
<td>312</td>
<td>Zinc Compound</td>
<td>1-4%</td>
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</table>

#### Hazardous Materials Identification System (HMIS)

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Rating</th>
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<tbody>
<tr>
<td>HEALTH</td>
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<tr>
<td>FLAMMABILITY</td>
<td>1</td>
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<tr>
<td>REACTIVITY</td>
<td>1</td>
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<tr>
<td>Personal Protection</td>
<td>*</td>
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</table>

#### JAPAN PRTR

<table>
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<tr>
<th>Class</th>
<th>Chemicals</th>
</tr>
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<tbody>
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<td>I</td>
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</tr>
<tr>
<td>II</td>
<td>none</td>
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</table>

#### Risk phrases in section 3:

**none**

#### Changes to the MSDS in this revision:

**section 1; updated to new format.**

This information is based solely on data provided by suppliers of the materials used, not on the mixture itself. No warranty is expressed or implied regarding the accuracy of the data or the suitability of the product for the user’s particular purpose. The user must make their own determination as to suitability.