1. Identification

Product identifier: Moly-Graph® Extreme Pressure Multi-Purpose Grease
Other means of identification: SL3144
Recommended use: Lubricating grease
Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information:
Company name: CRC Industries, Inc.
Address: 885 Louis Dr.
Warminster, PA 18974 US
Telephone:
- General Information: 215-674-4300
- Technical Assistance: 800-521-3168
- Customer Service: 800-272-4620
- 24-Hour Emergency: 800-424-9300 (US)
  (CHEMTREC): 703-527-3887 (International)
Website: www.crcindustries.com

2. Hazard(s) identification

Physical hazards: Not classified.
Health hazards:
- Serious eye damage/eye irritation: Category 2A
- Sensitization, skin: Category 1

Environmental hazards: Not classified.
OSHA defined hazards: None.
Label elements:
- Signal word: Warning
- Hazard statement: May cause an allergic skin reaction. Causes serious eye irritation.
- Precautionary statement:
  - Prevention: Avoid breathing vapors. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear eye protection/face protection. Wear protective gloves.
  - Response: If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse. 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 attention.
  - Storage: Store away from incompatible materials.
  - Disposal: Dispose of contents/container in accordance with local/regional/national regulations.
- Hazard(s) not otherwise classified (HNOC): None known.

3. Composition/information on ingredients

Mixtures
Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

**Inhalation**
Move to fresh air. Provide oxygen or artificial respiration if needed. Call a physician if symptoms develop or persist.

**Skin contact**
Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

**Eye contact**
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion**
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. Rash.

*Most important symptoms/effects, acute and delayed*
Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

*Indication of immediate medical attention and special treatment needed*
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

### 5. Fire-fighting measures

**Suitable extinguishing media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media**
None known.

**Specific hazards arising from the chemical**
During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**
Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**Fire-fighting equipment/instructions**
Use water spray to cool unopened containers.

**General fire hazards**
No unusual fire or explosion hazards noted.

### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**
The product is immiscible with water and will spread on the water surface. Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

**Environmental precautions**
Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage

Precautions for safe handling

Avoid contact with eyes, skin, and clothing. Avoid breathing vapor. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. For product usage instructions, please see the product label.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry place out of direct sunlight. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)</td>
<td>PEL</td>
<td>5 mg/m³</td>
<td>Mist.</td>
</tr>
<tr>
<td>US. ACGIH Threshold Limit Values</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Components</td>
<td>Type</td>
<td>Value</td>
<td>Form</td>
</tr>
<tr>
<td>distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
</tbody>
</table>

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)</td>
<td>Ceiling</td>
<td>1800 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
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<td>Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)</td>
</tr>
<tr>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Mist.</td>
<td></td>
</tr>
<tr>
<td>STEL</td>
<td>10 mg/m³</td>
<td>Mist.</td>
<td></td>
</tr>
</tbody>
</table>

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Occupational Exposure Limits are not relevant to the current physical form of the product.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection

Wear protective gloves such as: Rubber. Latex.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state

Solid.

Form

Grease.
Color
Gray.

Odor
Mild petroleum.

Odor threshold
Not available.

pH
Not available.

Melting point/freezing point
Not available.

Initial boiling point and boiling range
680 °F (360 °C) estimated

Flash point
> 400 °F (> 204.4 °C) Cleveland Open Cup

Evaporation rate
Slow.

Flammability (solid, gas)
Not available.

Upper/lower flammability or explosive limits
Flammability limit - lower (%)
Not available.

Flammability limit - upper (%)
Not available.

Vapor pressure
324146.3 hPa estimated

Vapor density
> 5 (air = 1)

Relative density
0.9

Solubility (water)
Insoluble.

Partition coefficient (n-octanol/water)
Not available.

Auto-ignition temperature
500 °F (260 °C) estimated

Decomposition temperature
Not available.

Viscosity (kinematic)
Not available.

Percent volatile
Not available.

10. Stability and reactivity
Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability
Material is stable under normal conditions.

Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

Conditions to avoid
Contact with incompatible materials.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
Carbon oxides. Metal oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation
Prolonged inhalation may be harmful.

Skin contact
May cause an allergic skin reaction.

Eye contact
Causes serious eye irritation.

Ingestion
Can cause stomach ache and vomiting.

Symptoms related to the physical, chemical and toxicological characteristics
Prolonged or excessive inhalation may cause respiratory tract irritation. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity
May cause an allergic skin reaction. Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moly-Graph® Extreme Pressure</td>
<td>Rabbit</td>
<td>2353 mg/kg estimated</td>
</tr>
<tr>
<td>Multi-Purpose Grease</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Material name: Moly-Graph® Extreme Pressure Multi-Purpose Grease

SL3144    Version #: 03    Revision date: 02-18-2016    Issue date: 02-18-2016
**Test Results**

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>5824 mg/kg estimated</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation**

- Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation**

- Causes serious eye irritation.

**Respiratory sensitization**

- Not a respiratory sensitizer.

**Skin sensitization**

- May cause an allergic skin reaction.

**Germ cell mutagenicity**

- No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**

- Based on available data, the classification criteria are not met.
  
  **IARC Monographs. Overall Evaluation of Carcinogenicity**
  
  Not available.
  
  **US. National Toxicology Program (NTP) Report on Carcinogens**
  
  Not available.

**Reproductive toxicity**

- This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure**

- Not classified.

**Specific target organ toxicity - repeated exposure**

- Not classified.

**Aspiration hazard**

- Not an aspiration hazard.

**Chronic effects**

- Prolonged exposure may cause chronic effects.

### 12. Ecological information

**Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

<table>
<thead>
<tr>
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<th>Species</th>
<th>Test Results</th>
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<tbody>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia magna)</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Rainbow trout,donaldson trout (Oncorhynchus mykiss)</td>
</tr>
<tr>
<td>phosphorodithioic acid, o,o-di-c1-14-alkyl esters, zinc salts (CAS 68649-42-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia magna)</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fathead minnow (Pimephales promelas)</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

**Persistence and degradability**

- Not readily biodegradable.

**Bioaccumulative potential**

- No data available.

**Mobility in soil**

- No data available.

**Other adverse effects**

- No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

**Disposal of waste from residues / unused products**

- This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty containers may be recycled. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.

**Hazardous waste code**

- Not regulated.

**Contaminated packaging**

- Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
14. Transport information

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

15. Regulatory information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

SARA 304 Emergency release notification
Not regulated.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance
phosphorodithioic acid, o,o-di-c1-14-alkyl esters, zinc salts (CAS 68649-42-3)

CERCLA Hazardous Substance List (40 CFR 302.4)
phosphorodithioic acid, o,o-di-c1-14-alkyl esters, zinc salts (CAS 68649-42-3)

CERCLA Hazardous Substances: Reportable quantity
Not listed.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

Food and Drug Administration (FDA)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Section 311/312
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
No

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))
distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)

US. Massachusetts RTK - Substance List
None.

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed.

US. Rhode Island RTK
phosphorodithioic acid, o,o-di-c1-14-alkyl esters, zinc salts (CAS 68649-42-3)

US. New Jersey Worker and Community Right-to-Know Act
phosphorodithioic acid, o,o-di-c1-14-alkyl esters, zinc salts (CAS 68649-42-3)

US. Pennsylvania Worker and Community Right-to-Know Law
Not listed.
US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Volatile organic compounds (VOC) regulations
EPA
VOC content (40 CFR 51.100(s)) Not determined
Consumer products (40 CFR 59, Subpt. C) Not regulated
State
Consumer products Not regulated
VOC content (CA) Not determined
VOC content (OTC) Not determined

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

<table>
<thead>
<tr>
<th>Issue date</th>
<th>02-18-2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision date</td>
<td>02-18-2016</td>
</tr>
<tr>
<td>Prepared by</td>
<td>Allison Cho</td>
</tr>
<tr>
<td>Version #</td>
<td>03</td>
</tr>
<tr>
<td>Further information</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
| HMIS® ratings       | Health: 1  
                     | Flammability: 1  
                     | Physical hazard: 0  
                     | Personal protection: B |
| NFPA ratings        | Health: 1  
                     | Flammability: 1  
                     | Instability: 0 |

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