SAFETY DATA SHEET

209 Moly Universal Gear Lube SAE 80, 90, 140, 250
and ISO 150, 220, 320, 460, 680, 1000

Section 1. Identification

GHS product identifier: 209 Moly Universal Gear Lube SAE 80, 90, 140, 250 and ISO 150, 220, 320, 460, 680, 1000

Other means of Identification: Not available

Product type: Liquid

Identified uses: Lubricant for enclosed gear drives and bearings.

Supplier's details: Schaeffer Mfg. Company
102 Barton Street
Saint Louis, Missouri 63104
Tel: 314-865-4100
Fax: 314-865-4107
Toll Free: 1-800-325-9962
Email: safety@schaefferoil.com
Web: http://www.schaefferoil.com

Emergency telephone number (with hours of operation): +1 314 865-4105 (24-hour response number)

Section 2. Hazards identification

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture: SKIN SENSITIZATION – Category 1

GHS label elements
Hazard pictograms: !
Section 2. Hazards identification

**Signal word**: Warning

**Hazard statements**: May cause an allergic skin reaction.

**Precautionary statements**

**Prevention**: Wear protective gloves. Avoid breathing vapor. Contaminated work clothing should not be allowed out of the workplace.

**Response**: IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention.

**Storage**: Not applicable.

**Disposal**: Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified**: None known.

Section 3. Composition/information on ingredients

**Substance/mixture**: Mixture

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Oil (s)(*)</td>
<td>60-100</td>
<td>See below.</td>
</tr>
<tr>
<td>Long-chain alkyl amine</td>
<td>0.1-1</td>
<td>-</td>
</tr>
<tr>
<td>Long-chain alkenyl amine</td>
<td>0.1-1</td>
<td>-</td>
</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to batch variation. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8. Base oil(s) contained in this material may be described by one or more of the following CAS Nos.: 64742-52-5, 64742-62-7.

Section 4. First aid measures

**Description of necessary first aid measures**

**Eye contact**: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention if irritation occurs.

**Inhalation**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in
Section 4. First aid measures

recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact**

Wash with plenty of soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before use.

**Ingestion**

Wash out mouth with water. Remove dentures if any. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting maybe dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

**Potential acute health effects**

- **Eye contact**: No known significant effects or critical hazards.
- **Inhalation**: No known significant effects or critical hazards.
- **Skin contact**: May cause an allergic skin reaction.
- **Ingestion**: No known significant effects or critical hazards.

**Over-exposure signs/symptoms**

- **Eye contact**: No known significant effects or critical hazards.
- **Inhalation**: No known significant effects or critical hazards.
- **Skin contact**: Adverse symptoms may include the following:
  - Irritation
  - Redness
- **Ingestion**: No known significant effects or critical hazards.

**Indication of immediate medical attention and special treatment needed, if necessary**

- **Notes to physician**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **Specific treatments**: No specific treatment.
- **Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)
Section 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media**: Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media**: None known.

**Specific hazards arising from the chemical**: No specific fire or explosion hazard.

**Hazardous thermal decomposition product**: No specific data.

**Special protective actions**: No special measures are required.

**Special protective equipment for fire-fighters**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

**For non-emergency Personnel**: No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders**: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in “For non-emergency personnel”.

**Environmental precautions**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. U.S.A. regulations may require reporting spills of this material that could reach any surface waters. Report spills to all applicable Federal, State, Provincial and local authorities and/or the United States National Response Center at (800) 424-8802 as appropriate or required.

**Methods and materials for containment and cleaning up**

**Small spill**: Stop leak if without risk. Move containers from spill area. Absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Section 6. Accidental release measures

Large spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or clothing. Do not ingest. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage including any incompatibilities: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
Section 8. Exposure controls/personal protection

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Oil(s)(*)</td>
<td>NIOSH REL (United States, 10/2013). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist ACGIH TLV (United States). TWA: 5 mg/m³ Form: Oil Mist STEL: 10 mg/m³ Form: Oil mist OSHA PEL (United States). TWA: 5 mg/m³ Form: Oil mist.</td>
</tr>
</tbody>
</table>

**Appropriate engineering Controls**

: Good general ventilation should be sufficient to control exposure to airborne contaminants.

**Environmental exposure Controls**

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

**Individual protection measures**

**Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection**

: Wear eye protection such as safety glasses, chemical goggles, or face shields if engineering controls or work practices are not adequate to prevent eye contact.

**Skin Protection**

**Hand protection**

: Use nitrile or oil resistant gloves.

**Body protection**

: Personal protective clothing such as gloves, aprons, boots and complete facial protection should be selected based on the task being performed and the risks involved. Users should determine acceptable performance characteristics of protective clothing.

**Other skin protection**

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.

**Respiratory protection**

: If a risk assessment indicates that respiratory protection is required, use a properly fitted, air-purifying or supplied air respirator that complies with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
209 Moly Universal Gear Lube SAE 80, 90, 140, 250
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Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid. [Clear.]</td>
</tr>
<tr>
<td>Color</td>
<td>Green-grey</td>
</tr>
<tr>
<td>Odor</td>
<td>Strong odor</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting point/Dropping Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>&gt;300°C (&gt;600°F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>Open cup: 224°-274°C (435°-525°F)</td>
</tr>
<tr>
<td>Evaporation point</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available</td>
</tr>
<tr>
<td>Lower and upper explosive (flammable) limits</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor density</td>
<td>&gt;10</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.875</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Kinematic (100°C): 11.0 to 46.0 cSt</td>
</tr>
<tr>
<td></td>
<td>Kinematic (40°C): 135-1100 cSt</td>
</tr>
<tr>
<td>Volatility</td>
<td>Negligible</td>
</tr>
<tr>
<td>VOC content</td>
<td>Not available</td>
</tr>
</tbody>
</table>

Section 10. Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reactivity</strong></td>
<td>No specific test data related to reactivity for this product or its ingredients.</td>
</tr>
<tr>
<td><strong>Chemical stability</strong></td>
<td>This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.</td>
</tr>
<tr>
<td><strong>Possibility of hazardous reactions</strong></td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td><strong>Conditions to avoid</strong></td>
<td>High heat, high energy ignition sources.</td>
</tr>
<tr>
<td><strong>Incomplete materials</strong></td>
<td>Reactive or incompatible with the following materials: Strong oxidizing and reducing agents.</td>
</tr>
<tr>
<td><strong>Hazardous decomposition products</strong></td>
<td>Oxides of carbon, sulfur and by-products of incomplete combustion.</td>
</tr>
</tbody>
</table>
Section 11. Toxicological information

Information on toxicological effects

Acute toxicity
There is no data available.

Irritation/Corrosion
There is no data available.

Sensitization
There is no data available.

Carcinogenicity
There is no data available.

Specific target organ toxicity (single exposure)
There is no data available.

Specific target organ toxicity (repeated exposure)
There is no data available.

Aspiration hazard
There is no data available.

Information on the likely routes of exposure
Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : May cause an allergic skin reaction.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : Adverse symptoms may include the following:
  Irritation
  Redness
Ingestion : No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effect from short and long term exposure

Short term exposure
Potential immediate effects : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.
Section 11. Toxicological information

Long term exposure

Potential immediate effects : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates
There is no data available.

Section 12. Ecological information

Toxicity
There is no data available.

Persistence and degradability
There is no data available.

Bioaccumulative potential
There is no data available.

Mobility in soil

Soil/water partition coefficient (Koc) : Not available.

Other adverse effects : No known significant effects or critical hazards.
Section 13. Disposal considerations

**Disposal methods**: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transportation information

<table>
<thead>
<tr>
<th>DOT Classification</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UN number</strong></td>
<td>Not regulated.</td>
<td>Not regulated.</td>
</tr>
<tr>
<td><strong>UN proper shipping name</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Transport hazard class(es)</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Packing group</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Environmental hazards</strong></td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td><strong>Additional information</strong></td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**AERG**: Not applicable.

**Special precautions for user**: Transport within user’s premises: always transport closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**: Not available.

Section 15. Regulatory information

**U.S. Federal regulations**: TSCA 8(a) PAIR: Siloxanes and Silicones, di-Me; Naphthalene
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): At least one component is not listed.
Clean Water Act (CWA) 307: Toluene; Ethylbenzene; Naphthalene
Clean Water Act (CWA) 311: Ammonia; Toluene; Potassium hydroxide; Ethylbenzene; Xylene; Naphthalene
Section 15. Regulatory information

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)
: Not listed.

Clean Air Act Section 602
Class I Substances
: Not listed.

Clean Air Act Section 602
Class II Substances
: Not listed.

DEA List I Chemicals
(Prececur Chemicals)
: Not listed.

DEA List II Chemicals
(Essential Chemicals)
: Not listed.

SARA 302/304
Composition/information on ingredients
No products were found.

SARA 304 RQ
: Not applicable.

SARA 311/312
Classification
: Immediate (acute) health hazard.

Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-chain alkyl amine</td>
<td>0.1-1</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>Long-chain alkenyl amine</td>
<td>0.1-1</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
</tbody>
</table>

SARA 313
No products were found.

State regulations

Massachusetts
: None of the components are listed.

New York
: None of the components are listed.

New Jersey
: The following components are listed: Distillates (petroleum), hydrotreated heavy naphthenic; Residual oils (petroleum), solvent-dewaxed

Pennsylvania
: None of the components are listed.
Section 15. Regulatory information

**California Prop. 65**

**WARNING:** This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

**WARNING:** This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Cancer</th>
<th>Reproductive</th>
<th>No significant risk level</th>
<th>Maximum acceptable dosage level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
<td>7000 µg/day (ingestion)</td>
</tr>
<tr>
<td>Cumene</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>13000 µg/day (inhalation)</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>41 µg/day (ingestion)</td>
</tr>
</tbody>
</table>

Section 16. Other information

**Hazardous Material Information System (U.S.A)**

Health : 1 * Flammability : 1 Physical hazards : 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J.J. Keller.

The customer is responsible for determining the PPE code for this material.

**National Fire Protection Association (U.S.A.)**

Health : 1 Flammability : 1 Instability: 0

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

**US Tariff Heading Number :** 2710.19.3040

**Schedule B Code :** 2710.19.3040
Section 16. Other information

History

Date of issue mm/dd/yyyy : 04/15/2015
Version : 1
Prepared by : KMK Regulatory Services Inc.

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