DESCRIPTIVE FEATURES OF PARKER
O-Lube
5/19/15

Description: Barium Grease

Water Content	0.2% max
Grease Number	#2 NLGI
Pour Point (open cup)	485°F max
Flash Point (open cup)	435°F min
Fire Point	485°F min
ASTM D217 Penetration @ 77°F	265-295
ASTM Drop Point	400°F min
ASH Sulfate	14.25% max
Specific Gravity	Less than 1.0 (.9007 to .9129)

Physical Data:

Boiling Point (°F)	700
Specific Gravity	Less than 1.0
Vapor Pressure	N/A
Percent, Volatile by Volume (%)	N/A
Vapor Density (Air = 1)	N/A
Evaporation Weight	Less than 1.0
Solubility in Water	Negligible
Appearance and Odor	Semi-Solid, Amber Color, No Odor

SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

5/19/15

Section I

Product Name: Parker O-Lube
Recommended Use: Lubricant (not for incidental food contact ormedical purpose)
Company: Parker Hannifin Corp., O-Ring Division
2360 Palumbo Drive, PO Box 11751
Lexington, KY 40512
Emergency Telephone No. (859) 269-2351

Section II - Hazards Identification

Classification: Category 5, Acute Toxicity – No Symbol

Labeling: Symbol: None
Signal Word: Warning
Hazard Statements: May be harmful if swallowed; May cause eye irritation; May cause skin irritation.

Precautionary Statements: Use personal protective equipment as required. Wear safety glasses and gloves. Avoid contact with eyes. Nonflammable or combustible, but may burn if involved in a fire.

Section III – Composition/Information on ingredients

Chemical Identity: Barium Fatty Acid Complex, 13-17%
Common Name: None
CAS Number: 68201-19-4
Impurities: No information provided by manufacturer

Chemical Identity: Mineral Oil, 83-87%
Common Name: None
CAS Number: 64742-52-5
Impurities: No Information provided by manufacturer

Section IV – First Aid Measures

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention. Obtain medical attention.

Skin Contact: Wash affected area with soap and water. If signs/symptoms persist, get medical attention. No need for first aid is anticipated.

Inhalation: If signs/symptoms develop, remove person to fresh air. If signs/symptoms persist, get medical attention.

Ingestion: If swallowed, do not induce vomiting. If irritation or discomfort occurs, obtain medical attention.

Section V – Fire Fighting Measures

Autoignition Temperature: >200°C (392°F)
Flash Point: >176°C (348°F)
Flammable Limits (LEL): Not Determined
Flammable Limites (UEL): Not Determined

Suitable Extinguishing Media: On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO2), dry chemical or water spray. Water can be used to cool fire exposed containers.

Unsuitable Extinguishing Media: None

Specific hazards in case of fire: Decomposes on heating and can release formaldehyde. Avoid reaction with oxidizers.

Special protective equipment and precautions for the fire fighters:

No acute hazard. Move container from fire area if possible. Avoid breathing vapors and dusts. Keep upwind. Use full firefighting gear (bunker gear). Any supplied-air respirator with full face piece and operated in a pressure-demand or other positive pressure mode in combination with a separate escape air supply. Use any self-contained breathing apparatus with a full face piece.

Alert fire brigade and indicate hazard location. Wear breathing apparatus plus protective clothing. Cool fire exposed containers with water spray from a protected location. Do not approach containers suspected to be hot. If so to do so, remove containers from path of fire.

Section VI – Accidental Release Measures

Personal precautions: Use appropriate person protection. (See section 8)

Environmental precautions: For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Dispose of collected materials as soon as possible.

Methods for material containment and cleaning up:

Observe precautions from other sections. Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Clean up residue with an appropriate solvent. Seal the container.

Section VII – Handling and Storage

Precautions for safe handling: Avoid contact with skin, inhalation of mist, or ingestion. See section

8 for personal protection equipment. Practice good personal hygiene to prevent accidental ingestion after handling. Properly dispose of clothing that cannot be decontaminated.

Conditions for safe storage, including any incompatibilities:

Store away from oxidizing materials. Store product in a closed container located in a dry area. Do not store in open, inadequate, or mislabeled packaging. Check that containers are clearly labeled. Use metal cans, metal drums, plastic, or lined fiber containers. Keep away from heat and flame.

Section VIII – Exposure Controls / Personal Protection

Control parameters:	Under most handling conditions, this product will not generate mist or dust.
Engineering controls:	In most conditions, no special local ventilation is needed. General ventilation recommended. If the product is heated about 150°F or atomized, ventilation should be used.
Personal Protective Equipment (PPE):	
Eyes:	Safety glass recommended
Skin:	Impermeable gloves should be worn. Product is compatible with most elastomers.
Inhalation:	No respiratory protection required under most conditions. If concentrations exceed exposure limits, approved respiratory equipment must be used.

Section IX – Chemical and Physical Properties

Physical State:	Solid. Liquid may separate from product
Color:	Amber
Odor:	Mild
Odor Threshold:	Not available
pH Value:	Not applicable
Melting Point:	204°C
Freezing Point:	Becomes very stiff with decreasing temperature around -20°C
Initial Boiling Point:	>200°C
Flash Point:	176°C COC (base oil)
Evaporation Rate:	Not available
Flammability (solid, gas):	Not applicable
Explosion Limits:	Not available
Vapor Pressure:	Negligible at 20 °C
Vapor Density:	Not available
Solubility:	Insoluble in water at 20°C
Partition Coefficient:	Not available
Auto-ignition Temperature:	Not available
Decomposition Temperature:	Begins to oxidize at a slow rate at 125°C

Section X – Stability and Reactivity

Chemical Stability:	Stable under ambient temperatures and pressures.
Possibility of hazardous reactions:	Can react with strong oxidizers. Other hazardous reactions have not

been identified. Otherwise will not react or polymerize.

Conditions to Avoid: No specific conditions to avoid have been identified.

Materials to Avoid: Oxidizers

Hazardous decomposition products: Decomposes on heating and produces formaldehyde, silicone dioxide, and completely burned carbon dioxide.

Section XI – Toxicological Information

Toxicity:

Barium Acetate (Similar material to barium fatty acid complex)

Ingestion LD_{50} (rat) 921 mg/kg
Causes damages to lungs, nervous system, and mucous membranes. Very hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant). Excreted in maternal milk in animal. Passes though placental barrier in human.

Mineral Oil

Ingestion LD_{50} (rat) >5,000 mg/kg, Dermal LD_{50} (rabbit) >5,000 mg/kg, Inhalation LC_{50} (rat) >5 mg/L 4h Expected to be slightly irritating to skin and eyes. Inhalation of vapors can cause irritation to the respiratory system. Not expected to be skin sensitizer or aspiration hazard. Not considered to be mutagenic hazard. Not classified as carcinogenic.

Section XII – Ecological Information

Toxicity:

Barium Fatty Acid Complex

Water soluble barium compounds formed after chemical break down are significantly more hazardous than the material as supplied.

Mineral Oil

Practically nontoxic to fish, aquatic invertebrates, algae, and microorganisms $LL/EL/IL_{50}$ >100 mg/L Chronic toxicity for fish NOEC/NOEL > 100 mg/L, aquatic invertebrates NOEC/NOEL >1.0 - <= 10 mg/L

Section XIII – Disposal Procedures

Waste treatment methods: Waster (substance and container material) shall be recycled/recovered or disposed of as applicable and in accordance with community (EU) and local legislation. Recycle wherever possible. Consult state land waste management authority for disposal. Bury at an approved site. Recycle containers if possible, or dispose of in an authorized landfill.

According to the European Waste Catalogue:

Waster codes are not product specific but application specific. Waste codes should be assigned by the user based on the application in which the product is used.

For USA Disposal: Waste must be disposed of in accordance with federal, state, and local environmental control regulations.

Section XIV – Transport Information

Class or Type: US DOT, IMO, ADR, RID, ADN, IMDG, and IATA: Non-hazardous

Section XV – Regulatory Information

Safety health and environmental regulations/legislations specific for the mixture:
Other Information:
U.S. Regulatory information

TSCA Inventory Status:	Y
TSCA 12 (b) Export Notification:	Not listed
CERCLA Section 103 (40 CFR 302.4):	N
SARA Section 302 (40 CFR 355.30):	N
SARA Section 304 (40 CFR 355.40):	N
SARA Section 313 (40 CFR 372.65):	Barium compounds 68201-19-4
OSHA Process Safety (29 CFR 1910.119):	N

SARA Hazard Categories, SARA Sections 311/312 (40 CFR 370.21)-

Acute Hazard:	N
Chronic Hazard:	N
Fire Hazard:	N
Reactivity Hazard:	N
Sudden Release Hazard:	N

State Regulations: Not on California Proposition 65 List. Does not contain any contaminants or by-products known to the State of California to cause cancer or reproductive toxicity.

Note: There are no known safety, health, or environmental restrictions or prohibitions in any country where this product is produced, imported or marketed.

Chemical Inventories:

DSL (Canada)	All ingredients listed or exempt
EINECS (European Union)	All ingredients listed or exempt
ENCS/ISHL (Japan)	All ingredients listed or exempt
IECSC (Peoples Republic of China)	All ingredients listed or exempt
TSCA (United States of America)	All ingredients listed or exempt

Section XVI – Other Information

NFPA Hazard Classification:

Health:	**2**
Flammability:	**1**
Reactivity:	**0**
Special Hazards:	**None**

National Fire Protection Associations (NFPA) hazard ratings are designed for use by emergency personnel to address the hazards that are presented by short-term, acute exposer to material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification:

Health:	**2**
Flammability:	**1**
Reactivity:	**0**
Protection:	**B (See PPE)**

Hazardous Material Identification System (HMIS) hazard ratings are designed to inform employees of chemical hazards in the workplace. The ratings are based on inherent properties of the material under expected conditions of normal use and not intended for use in emergency situations.

Prepared by:

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