SAFETY DATA SHEET

Regulation (EC) No 1907/2006 (REACH)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

1.1 Product Identifier

Trade Name Orelube HT-600M

SDS Date March 21, 2016

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product Use: Synthetic Industrial Lubricating Grease

Uses Advised Against: None known

1.3 Details of the Supplier of the Substance or Mixture

Manufacturer: THE ORELUBE CORPORATION

20 Sawgrass Drive Bellport, NY 11713 +1 (631) 205-9700

EU Distributor:

1.4 Emergency Telephone Number

Emergency Spill Information +1 (631) 205-9700 (Monday-Friday 9:00 – 17:00)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Physical	Health	Environmental
Not hazardous	Not Hazardous	Hazardous to the Aquatic
		Environment Chronic Toxicity
		Category 3 (H412)

2.2 Label Elements

H412 Harmful to aquatic life with long lasting effects.

2.3 Other Hazards: None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical Name	CAS Number / EINECS Number / REACH Reg. Number	% (w/w)	CLP/GHS Classification (1272/2008)
Synthetic Ester	Proprietary	80-90%	Not hazardous
Polytetrafluoroethylene	9002-84-0	1-10%	Not hazardous
Molybdenum Disulfide	1317-33-5 / 215-263-9	1-5%	Not hazardous
Triphenyl Phosphate	115-86-6 / 204-112-2	<1%	Aquatic Acute 1 H400 Aquatic Chronic H410

See Section 16 for full text of GHS Classifications.

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

First Aid

Inhalation: Remove person to fresh air. If irritation occurs or symptoms develop, get medical attention.

Skin contact: Remove contaminated clothing. Wash skin with soap and water. If irritation develops and persists, get medical attention. Launder clothing before reuse.

Eye contact: Immediately flush eyes with water while lifting the upper and lower lids. Get medical attention if irritation persists.

Ingestion: Rinse mouth with water. Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to a person who is unconscious or convulsing. Get medical attention if symptoms develop.

- **4.2 Most Important symptoms and effects, both acute and delayed:** May cause mild eye and skin irritation. Inhalation of mists may cause upper respiratory tract irritation. Ingestion may cause gastrointestinal distress with nausea and diarrhea.
- **4.3 Indication of any immediate medical attention and special treatment needed**: Immediate medical attention is not generally required.

SECTION 5: FIREFIGHTING MEASURES

- **5.1 Extinguishing Media:** Use water fog, foam carbon dioxide or dry chemical to extinguish a fire involving this product.
- **5.2 Special Hazards Arising from the Substance or Mixture:** Product is not flammable or combustible but may burn in a fire. Combustion products are hazardous and may include oxides of carbon, nitrogen and molybdenum, hydrogen fluoride, carbonyl fluoride, perfluoroisobutene, hexafluoropropene and tetrafluoroethylene.
- **5.3 Advice for Fire-Fighters:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for all fires involving chemicals. Cool fire exposed containers with water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- **6.1 Personal Precautions, Protective Equipment and Emergency Procedures:** Wear appropriate protective clothing and equipment as described in Section 8. Use caution surfaces will be very slippery.
- **6.2 Environmental Precautions:** Prevent spill from entering sewers and water courses. Report releases as required by local and national authorities.
- **6.3 Methods and Material for Containment and Cleaning Up:** Contain and collect with an inert absorbent material. Place in an appropriate container for disposal. Clean spill area thoroughly.
- 6.4 Reference to Other Sections:

Refer to Section 8 for personal protective equipment and Section 13 for disposal information.

SECTION 7: HANDLING and STORAGE

- **7.1 Precautions for Safe Handling**: Avoid breathing mists. Avoid contact with eyes, skin and clothing. Wash thoroughly with soap and water after handling. Keep away from open flames and hot surfaces.
- **7.2 Conditions for Safe Storage, Including any Incompatibilities**: Store in a dry, cool, well-ventilated area. Keep in original containers. Store away from oxidizing agents.

7.3 Specific end use(s):

Industrial uses: Synthetic Industrial Lubricating Grease **Professional uses:** Synthetic Industrial Lubricating Grease

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters:

Chemical Name	EU IOEL	French OEL	German OEL	UK OEL
Synthetic Ester	None Established	None Established	None Established	None Established
Polytetrafluoroethylene	None Established	None Established	None Established	None Established
Molybdenum Disulfide	None Established	5 mg/m3 TWA, 10 mg/m3 STEL (Mo soluble compounds)	None Established	10 mg/m3 TWA, 20 mg/m3 STEL (inhalable) (as Mo insoluble compounds) 5 mg/m3 TWA, 10 mg/m3 STEL (Mo soluble compounds)
Triphenyl Phosphate				

8.2 Exposure Controls:

Appropriate Engineering Controls: Use with adequate general or local exhaust ventilation to minimize exposures levels.

Personal Protective Measures

Respiratory protection: None needed under normal use conditions If exposure levels are excessive and irritation is experienced, an approved organic vapor/particulate respirator is recommended. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with EN Standards and good Industrial Hygiene practice.

Skin protection: Impervious gloves recommended if needed to avoid prolonged skin contact.

Eye protection: Safety goggles recommended.

Other: None known.

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

9.1 Information on basic Physical and Chemical Properties

Appearance (physical state, color, etc.): Black grease

Odor: No characteristic odor

Odor threshold: Not determined	pH: Not applicable		
Melting point/freezing point: Not determined	Boiling Point: Not determined		
Flash point: >400°F (>204°C) COC (synthetic ester)	Evaporation rate (butyl acetate =1): <1		
Flammability (solid, gas): Not applicable	VOC: Not determined		
Flammable limits: LEL: Not determined	UEL: Not determined		
Vapor pressure: Not determined	Vapor density: Not determined		
Relative density: 0.99	Solubility(ies): Insoluble in water		
Partition coefficient: n-octanol/water: Not available	Auto-ignition temperature: Not available		
Decomposition temperature: Not available	Viscosity: >20 cSt @40°C		
Explosive Properties: Not applicable	Oxidizing Properties: Not oxidizing		
Explosive Properties: Not applicable	Oxidizing Properties: Not oxidizing		

9.2 Other Information: None available

SECTION 10: STABILITY and REACTIVITY

10.1 Reactivity: Not reactive under normal conditions of use.

10.2 Chemical Stability: Stable.

10.3 Possibility of Hazardous Reactions: None known.

10.4 Conditions to Avoid: Extreme heat and open flames.

10.5 Incompatible Materials: Avoid oxidizing agents.

10.6 Hazardous Decomposition Products: Thermal decomposition may yield oxides of carbon, nitrogen and molybdenum, hydrogen fluoride, carbonyl fluoride, perfluoroisobutene, hexafluoropropene and tetrafluoroethylene.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

Potential Health Effects:

Inhalation: Inhalation of mists from heated product may cause minor irritation of the mucous membranes and upper respiratory tract. Inhalation of thermal decomposition of polytetrafluoroethylene may cause polymer fume fever with symptoms of tightness in the chest, fever, cough, shortness of breath and weakness. Severe exposures may cause pulmonary edema.

Ingestion: Ingestion may cause gastrointestinal distress with nausea and diarrhea.

Skin contact: May cause mild irritation and drying of the skin.

Eye contact: Contact may cause mild irritation with redness and tearing.

Chronic Effects: None known.

Sensitization: Components are not known to be sensitizers.

Skin corrosion/irritation: None of the components have been shown to cause skin irritation or corrosion. **Eye damage/ irritation:** None of the components have been shown to cause eye irritation or damage.

Respiratory Irritation: No data available. Expected to cause only temporary irritation.

Respiratory Sensitization: No data available.

Skin Sensitization: No data available. None of the components have been shown to cause skin sensitization.

Germ Cell Mutagenicity: No adverse effects are expected. Components are not germ cell mutagens.

Carcinogenicity: None of the components of this product are listed as carcinogens by IARC or the EU CLP.

Reproductive Toxicity: No adverse effects are expected. Components are not reproductive toxins.

Specific Target Organ Toxicity:

Single Exposure: No data available. **Repeat Exposure:** No data available.

Aspiration Toxicity: Does not meet the criteria for aspiration toxicity.

Acute Toxicity Values:

Synthetic Ester: Oral Rat LD50 >2000 mg/kg, Inhalation rat LC50 >5 mg/L/4 hr, Dermal rat LD50 >2000 mg/kg

Polytetrafluoroethylene: Oral rat LD50 >5,000 mg/kg, Dermal rabbit LD50 >5000 mg/kg

Molybdenum Disulfide: Oral rat LD50 >2000 mg/kg, Inhalation rat LC50 >2.82 mg/L/4 hr, Dermal rat LD50 >2000

ma/ka

Triphenyl Phosphate: Oral rat LD50 >20,000, Dermal rabbit LD50 >10,000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:

Synthetic Ester: 96 hr LL50 Oncorhynchus mykiss >100 mg/L, 48 hr EL50 daphnia magna >100 mg/L, 72 hr EL50

Desmodesmus subspicatus >100 mg/L Polytetrafluoroethylene: No data available

Molybdenum Disulfide: 96 hr EC50 Pimephales promelas 609.1 mg/L, 48 hr EC50 daphnia magna 2729.4 mg/L, 72 hr EC50 Pseudokirchnerella subcapitata >218 mg/L

Triphenyl phosphate: 96 hr LC50 Oncorhynchus mykiss 0.4 mg/L, 48 hr EC50 daphnia magna 1 mg/L, 96 hr EC50 Selenastrum capricornutum 2 mg/L

- **12.2 Persistence and degradability:** Synthetic ester is inherently biodegradable. Triphenyl phosphate is readily biodegradable.
- 12.3 Bioaccumulative Potential: Synthetic ester has a low potential to bioaccumulate in aquatic organisms.
- 12.4 Mobility in Soil: Synthetic ester is expected to have low mobility in soil. Triphenyl phosphate has a BCF of 180-
- 280. This suggests the potential for bioaccumulation is high.
- 12.5 Results of PBT and vPvB assessment: Not required.
 12.6 Other Adverse Effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods: Dispose in accordance with all local, state and federal regulations. No specific disposal method is recommended. It is the responsibility of the user, at the time of disposal, to determine whether the product meets the criteria for hazardous waste.

SECTION 14: TRANSPORTATION INFORMATION

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
US DOT		Not Regulated			
Canadian TDG		Not Regulated			
EU ADR/RID		Not Regulated			
IMDG		Not Regulated			
IATA/ICAO		Not Regulated			

- 14.6 Special Precautions for User: None known.
- **14.7 Transport in Bulk According to Annex III MARPOL 73/78 and the IBC Code:** Not applicable product is transported only in packaged form.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

EU Regulations:

RoHS: Compliant

German WGK: 1

This SDS was prepared in accordance with EC No. 1907/2006 as amended. Classification under EC No. 1272/2008 as amended following the mixture rules.

15.2 Chemical safety assessment: Not required

SECTION 16: OTHER INFORMATION

<u>CLP/GHS Classification and H Phrases for Reference (See Section 3)</u>
Aquatic Acute 1 Hazardous to the Environment Acute Toxicity Category 1
Aquatic Chronic Hazardous to the Environment Chronic Toxicity Category 1

H400 Very toxic to aquatic life H410 Very toxic to aquatic life with long lasting effects.

SDS Revision History: Convert to REACH GHS Format

Date of preparation: March 21, 2016 **Date of previous revision:** April 13, 2015

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