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 ET-2S

SDS Date September 1, 2015

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

Product Use: Food Grade Synthetic 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	Not Hazardous	

2.2 Label Elements

Not hazardous in accordance with the EU CLP (1272/2008)

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)
Polyalphaolefin	Mixture	80-100%	Not hazardous
Polytetrafluoroethylene	9002-84-0 Not applicable	1-5%	Not hazardous
Titanium Dioxide	13463-67-7	1-5%	Not hazardous
Crystalline Silica, Quartz	14808-60-7 238-878-4	0.1-0.5%	STOT RE 1 H372

See Section 16 for full text of GHS Classifications.

The exact percentage (concentration) and composition has been withheld as a trade secret.

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 irritation. Prolonged skin contact may cause 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, alcohol foam, carbon dioxide or dry chemical to extinguish a fire involving this product. Do not use solid water stream as this may spread the fire.
- **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 carbon oxides, hydrogen fluoride and carbonyl fluoride.
- **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 vapors or 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: Food Grade Synthetic Lubricating Grease **Professional uses:** Food Grade Synthetic Lubricating Grease

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters:

Chemical Name	EU IOEL	French OEL	German OEL	UK OEL
Polyalphaolefin	None Established	None Established	None Established	None Established
Polytetrafluoroethylene	None Established	None Established	None Established	None Established
Titanium Dioxide	None Established	11 mg/m³ TWA (inhalable aerosol)	None Established	None Established
Crystalline Silica, Quartz	None Established	0.1 mg/m ³ TWA	None Established	0.1 mg/m3 TWA

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:** Follow facility requirements. Safety goggles recommended if splashing is possible.

Other: None known

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

9.1 Information on basic Physical and Chemical Properties

Appearance (physical state, color, etc.): Off white 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 (polyalphaolefin)	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: Not determined	Solubility(ies): Insoluble in water		
Partition coefficient: n-octanol/water: Not available	Auto-ignition temperature: Not determined		
Decomposition temperature: Not available	Viscosity: >20 cSt @ 40°C		
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 carbon oxides, hydrogen fluoride and

carbonyl fluoride.

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 fumes from the 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: This product contains titanium dioxide and a small amount of crystalline silica, quartz. Titanium dioxide is listed by IARC as "Possibly Carcinogenic to Humans", Group 2B. Crystalline silica, quartz is listed by IARC as "Carcinogenic to Humans" (Group 1) and "Known to be a Human Carcinogen" by NTP. Titanium dioxide and crystalline silica, quartz only presents a risk of cancer by inhalation of very fine dust. In this product, these chemicals are incorporated into the grease and is not present as a respirable dust. There is no exposure to respirable crystalline silica, quartz or titanium dioxide dust in the normal use of this product. None of the other components are listed as a carcinogen or suspect carcinogen 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: No adverse effects are expected. Components do not pose an aspiration hazard.

Acute Toxicity Values:

Polyalphaolefin: Oral Rat LD50 >5000 mg/kg, Inhalation rat LC50 >5 mg/L/4 hr, Dermal rabbit LD50 >2000 mg/kg

Polytetrafluoroethylene: Oral rat LD50 >5,000 mg/kg, Dermal rabbit LD50 >5000 mg/kg Titanium Dioxide: Oral rat LD50 >5000 mg/kg, Inhalation rat LC50 >6.82 mg/L/4 hr

Crystalline Silica, Quartz: Oral rat LD50 >22,500 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:

Polyalphaolefin: 96 hr LL50 Oncorhynchus mykiss >1000 mg/L, 48 hr EL50 daphnia magna >1,000 mg/L, 96 hr NOEC Selenastrum capricornutum >1,000 mg/L

Polytetrafluoroethylene: No data available

Titanium Dioxide: 96 hr LC50 Pimephales promelas >1000 mg/L, 48 hr EC50 daphnia magna >1000 mg/L, 72 hr

EC50 Pseudokirchneriella subcapitata 61 mg/L

Crystalline Silica, Quartz: LC50 carp >10,000 mg/L/72 hr.

12.2 Persistence and degradability: Polyalphaolefin is not readily biodegradable.

12.3 Bioaccumulative Potential: Polyalphaolefin is not expected to bioaccumulate in aquatic organisms.

12.4 Mobility in Soil: No data available.

12.5 Results of PVT and vPvB assessment: Not required.

12.6 Other Adverse Effects: None known.

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 specific for the product in question.

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> STOT RE 1 Specific Target Organ Toxicity Repeat Exposure Category 1 H372 Causes damage to organs through prolonged or repeated exposure.

SDS Revision History: Convert to REACH GHS Format

Date of preparation: September 1, 2015 **Date of previous revision:** May 5, 2015

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