

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 Anti-Seize #2

SDS Date November 13, 2015

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

Product Use: Industrial Anti-Seize Grease Compound

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	Skin Sensitization Category 1 H317	Hazardous to the Environment Acute
		Toxicity Category 1 H400
		Hazardous to the Environment
		Chronic Toxicity Category 2 H411

2.2 Label Elements





Warning!

Hazard Statement

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

P261 Avoid breathing dust, fume, gas, mist, vapors or spray.

P272 Contaminated work clothing must not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P333 + P313 If skin irritation or rash occurs: Get medical attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

P501 Dispose of contents and container in accordance with local and national regulations.

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)
Petroleum Paraffinic Base Oil	64742-70-7 / 265-174-4	40-50%	Not hazardous
Copper Powder	7440-50-8 / 231-159-6	20-40%	Acute Aquatic 1 H400 Chronic Aquatic 3 H412
Natural Graphite	7782-42-5 / 231-955-3	10-20%	Not hazardous
Zinc Oxide	1314-13-2 / 215-222-5	10-20%	Aquatic Acute 1 H400 Aquatic Chronic 1 H410
Lubricant Additive	Proprietary	0.1-1%	Skin Irrit 2 H315 Skin Sens 1 H317 Aquatic Chronic 2 H411

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 or rash 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.

- **4.2 Most Important symptoms and effects, both acute and delayed:** May cause mild eye irritation. Prolonged skin contact may cause irritation and drying of the skin. May cause skin sensitization. Ingestion may cause gastrointestinal distress with nausea and diarrhea. Inhalation of mists may cause upper respiratory tract irritation.
- **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. 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, nitrogen, copper and zinc oxides.
- **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 the generation of 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: Industrial Anti-Seize Grease Compound Professional uses: Industrial Anti-Seize Grease Compound

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters:

Chemical Name	US OEL	EU IOEL	German Limits	UK Limits
Paraffin oils, petroleum, catalytic dewaxed, heavy (as mineral oil mist)	5 mg/m3 (inhalable) TWA ACGIH TLV 5 mg/m3 TWA OSHA PEL	None Established	None Established	None Established
Copper Powder	1 mg/m3 TWA ACGIH TLV (dust and mist) 00.2 mg/m3 TWA ACGIH TLV (as fume)	None Established	0.01 mg/m3 TWA 0.02 mg/m3 STEL (fume and respirable dust)	0.2 mg/m3 TWA
Natural Graphite	None Established	2 mg/m3 TWA (respirable)	1.5 mg/m3 TWA (respirable) 4 mg/m3 TWA (inhalable)	4 mg/m3 TWA (respirable) 10 mg/m3 TWA (inhalable)
Zinc Oxide	None Established	5 mg/m3 TWA (respirable dust), 10 mg/m3 TWA (total dust)	None Established	5 mg/m3 TWA, 10 mg/m3 TWA (fume or respirable dust)
Lubricant Additive	None Established	None Established	None Established	None Established

8.2 Exposure Controls:

Appropriate Engineering Controls: Use with adequate general or local exhaust ventilation to maintain exposures below occupational exposure limits.

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 to 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.): Bronze colored grease compound

Odor: No characteristic odor

Odor threshold: Not determined	pH: Not applicable	
Melting point/freezing point: Not determined	Boiling Point: Not determined	
Flash point: >300°F (149°C) (petroleum base oil)	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: 1.41	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	

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, nitrogen, sulfur, copper and zinc oxides.

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.

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

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

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

Chronic Effects: None known.

Skin corrosion/irritation: Lubricant additive has been shown to cause skin irritation. The product is not expected to cause skin irritation. .

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: Lubricant additive has been shown to cause skin sensitization in studies with laboratory animals.

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: Product does not meet the viscosity criteria.

Acute Toxicity Values:

Paraffin oils, petroleum, catalytic dewaxed, heavy: Oral Rat LD50 >5000 mg/kg, Inhalation rat LC50 >5.53 mg/L/4 hr, Dermal rabbit LD50 >2000 mg/kg

Copper: Oral rat LD50 >2000 mg/kg; Dermal rat LD50 >2000 mg/kg (structurally similar chemical) Inhalation rat LC50

>5.11 mg/L/4 hr

Natural Graphite: Oral Rat LD50 >2000 mg/kg, Inhalation rat LC50 >2.0 mg/L/4 hr (no mortalities)

Zinc oxide: Oral rat LD50 >5000 mg/kg, Inhalation rat LC50 >1.79 mg/L/4 hr (no mortalities), Dermal rabbit LD50

>2000 mg/kg

Lubricant Additive: Oral Rat LD50 >2000 mg/kg, Dermal rabbit LD50 >3313 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:

Petroleum Paraffinic Base Oil: 96 hr LL50 Pimephales promelas>100 mg/L, 48 hr EL50 daphnia magna >10,000 mg/L, 96 hr NOEL Pseudokirchnerella subcapitata >100 mg/L

Copper: 96 hr LC50 Pimephales promelas 193 ug/L, 48 hr EC50 daphnia 41 ug/L

Natural Graphite: 96 hr LC50 Danio rerio >100 mg/L, 48 hr EC50 daphnia magna >100 mg/L, 72 hr EC50

Pseudokirchnerella subcapitata >100 mg/L

Zinc oxide: 96 hr LC50 Danio rerio 23.06 mg/L, 48 hr EC50 daphnia magna 7.5 mg/L, 72 hr LC50 Pseudokirchnerella subcapitata 68 ug/L

Lubricant Additive: No data available. Expected to be toxic to aquatic life with long lasting effects.

- 12.2 Persistence and degradability: Petroleum paraffinic base oil is inherently biodegradable.
- **12.3 Bioaccumulative Potential** Petroleum paraffinic base oil has the potential to bioaccumulate in aquatic organisms.
- 12.4 Mobility in Soil: No data available.
- 12.5 Results of PBT and vPvB assessment: Components are not classified as PBT or vPvB.
- 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*	UN3082	Environmentally hazardous substances, liquid, n.o.s. (copper, zinc oxide)	9	PGIII	Marine Pollutant
Canadian TDG*	UN3082	Environmentally hazardous substances, liquid, n.o.s. (copper, zinc oxide)	9	PGIII	Marine Pollutant
EU ADR/RID*	UN3082	Environmentally hazardous substances, liquid, n.o.s. (copper, zinc oxide)	9	PGIII	Marine Pollutant
IMDG*	UN3082	Environmentally hazardous substances, liquid, n.o.s. (copper, zinc oxide)	9	PGIII	Marine Pollutant
IATA/ICAO*	UN3082	Environmentally hazardous substances, liquid, n.o.s. (copper, zinc oxide)	9	PGIII	Yes

^{*}Single packages or combination packages with inner containers of 5 kg/5 liters do not meet the definition of a marine pollutant per 49 CFR 171.4(c)(2) (US DOT), 2.10.2.7 (IMDG) or Environmentally Hazardous per Special provision A197 (ICAO) and can be shipped as unregulated. Marine Pollutants are not regulated under TDG when transported solely by road or rail.

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: 2

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

CLP/GHS Classification and H Phrases for Reference (See Section 3)

Skin Irrit 2 Skin Irritation Category 2

Skin Sens 1 Skin Sensitization Category 1

Aquatic Acute 1 Hazardous to the Aquatic Environment Acute Hazard Category 1

Aquatic Chronic 1 Hazardous to the Aquatic Environment Chronic Hazard Category 1

Aquatic Chronic 3 Hazardous to the Aquatic Environment Chronic Hazard Category 3

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects

SDS Revision History: Convert to REACH GHS Format

Date of preparation: November 13, 2015 **Date of previous revision:** June 30, 2014

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