



SAFETY DATA SHEET

1. IDENTIFICATION

Product identifier: Orelube Anti-Seize #2

Manufacturer Name: THE ORELUBE CORPORATION
Address: 20 Sawgrass Drive
Bellport, NY 11713

Telephone number: (631) 205-9700

Emergency phone number: Infotrac 1-800-535-5053 / shipments in the USA and/or Canada
+1-352-323-3500 / shipments outside USA (international)

Recommended use: Industrial Anti-Seize Grease Compound
Restrictions on use: None known

Date of Preparation: November 13, 2015

2. HAZARD(S) IDENTIFICATION

Classification:

Physical	Health
Not hazardous	Skin Sensitization Category 1

Label Elements:



Warning!

Hazard Statement

May cause an allergic skin reaction.

Precautionary Statements

Avoid breathing dust, fume, gas, mist, vapors or spray.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical attention.
Take off contaminated clothing and wash it before reuse.
Dispose of contents and container in accordance with local and national regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
Petroleum Paraffinic Base Oil	64742-70-7	40-50%
Copper Powder	7440-50-8	20-40%
Natural Graphite	7782-42-5	10-20%
Zinc Oxide	1314-13-2	10-20%
Lubricant Additive	Proprietary	0.1-1%

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

4. FIRST-AID MEASURES

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.

Most important symptoms/effects, 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.

Indication of immediate medical attention and special treatment, if necessary: Immediate medical attention is not generally required.

5. FIRE-FIGHTING MEASURES

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.

Specific hazards arising from the chemical: 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.

Special protective equipment and precautions 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.

6. ACCIDENTAL RELEASE MEASURES

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.

Environmental Precautions: Prevent spill from entering sewers and water courses. Report releases as required by local and national authorities.

Methods and materials for containment and cleaning up: Contain and collect with an inert absorbent material. Place in an appropriate container for disposal. Clean spill area thoroughly.

7. HANDLING AND STORAGE

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.

Conditions for safe storage, including any incompatibilities: Store in a dry, cool, well-ventilated area. Keep in original containers. Store away from oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

Petroleum Paraffinic Base Oil	5 mg/m3 TWA OSHA PEL (as oil mist) 5 mg/m3 TWA ACGIH TLV (inhalable)
Copper Powder	1 mg/m3 TWA OSHA PEL (dust and mist)

	1 mg/m ³ TWA ACGIH TLV (dust and mist) 0.1 mg/m ³ TWA OSHA PEL (as fume) 0.2 mg/m ³ TWA ACGIH TLV (as fume)
Natural Graphite	15 mppcf TWA OSHA PEL 2 mg/m ³ TWA ACGIH TLV (respirable)
Zinc Oxide	5 mg/m ³ TWA (respirable fraction, 15 mg/m ³ TWA (total dust) OSHA PEL 2 mg/m ³ TWA ACGIH TLV (respirable fraction)

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

Individual protection measures:

Respiratory protection: None needed under normal use conditions. If exposure levels are excessive and irritation is experienced, a NIOSH approved organic vapor/particulate respirator is recommended. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with OSHA 1910.134 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.

9. 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: >300.2°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

10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions of use.

Chemical stability: Stable.

Possibility of hazardous reactions: None known.

Conditions to avoid: Extreme heat and open flames.

Incompatible materials: Avoid oxidizing agents.

Hazardous decomposition products: Thermal decomposition may yield carbon, nitrogen, sulfur, copper and zinc oxides.

11. TOXICOLOGICAL INFORMATION

Acute effects of exposure:

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.

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.

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

Carcinogenicity: None of the other components are listed as a carcinogen or suspect carcinogen by IARC, NTP or OSHA.

Acute Toxicity Values:

Petroleum Paraffinic Base Oil: Oral Rat LD50 >5000 mg/kg, Inhalation rat LC50 >5.53 mg/L/4 hr, Dermal rabbit LD50 >2000 mg/kg

Copper Powder: 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

12. ECOLOGICAL INFORMATION

Ecotoxicity values:

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

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

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

Persistence and degradability: Petroleum paraffinic base oil is inherently biodegradable.

Bioaccumulative potential: Petroleum paraffinic base oil has the potential to bioaccumulate in aquatic organisms.

Mobility in soil: No data available.

Other adverse effects: This product is expected to be very toxic to aquatic life. This product is expected to be toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, state and federal regulations. No specific disposal method is recommended. Under RCRA, it is the responsibility of the user, at the time of disposal, to determine whether the product meets the RCRA criteria for hazardous waste. As sold, this product would not meet the criteria.

14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT*	UN3077	Environmentally hazardous substances, solid, n.o.s. (copper, zinc oxide)	9	PGIII	Marine Pollutant
TDG*	UN3077	Environmentally hazardous substances, solid, n.o.s. (copper, zinc oxide)	9	PGIII	Marine Pollutant
IMDG*	UN3077	Environmentally hazardous substances, solid, n.o.s. (copper, zinc oxide)	9	PGIII	Marine Pollutant
ICAO*	UN3077	Environmentally hazardous substances, solid, 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.

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None known.

15. REGULATORY INFORMATION

Safety, health, and environmental regulations specific for the product in question.

CERCLA: This product has a Reportable Quantity (RQ) of 16,666 lbs. (based on the RQ for copper of 5,000 lbs). Releases above the RQ and oils spills must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Acute Health

EPA SARA 313: This product contains the following chemicals regulated under SARA Title III, section 313:

Zinc Oxide	1314-13-2	1-10%
Copper powder	7440-50-8	20-40%

EPA TSCA Inventory: All the components of this product are listed on the TSCA inventory or exempt.

California Proposition 65: This product does not contain chemicals known to the State of California to cause cancer and reproductive toxicity.

16. OTHER INFORMATION

NFPA Rating: Health = 2 Flammability = 1 Instability = 0
HMIS Rating: Health = 2 Flammability = 1 Physical Hazard = 0

SDS Revision History: All Sections - Convert to OSHA GHS Format

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