

**I – Identification of the Substance and of the Company**

SUPPLIER: RMO, Inc.
650 W. Colfax Ave.
Denver, CO 80204
303-592-8200

Trade Name and Synonyms – RMO
Instrument Lubricant
Description: Technical grade white oil

Emergency Information Chemtrec: 800-424-9300
Chemtrec International: 202-483-7616

Product Grade / Name:
Instrument Lubricant

II – Composition / Information on Ingredients

Hazardous ingredients present at or above regulatory disclosure levels: None

III – Hazards Identification

This product is not considered hazardous according to EU regulatory guidelines.
This product contains a highly refined base oil and is not considered to present any hazard during normal use, although the OEL for oil mist should be observed.
Aspiration of liquid into the lungs directly or as a result of vomiting following ingestion of the liquid can cause severe lung damage and death.
This product should not be used for any other purpose without expert advice.

IV – First Aid Measures

Eye Contact: No adverse effects due to eye contact are expected.
Skin Contact: No adverse effects due to skin contact are expected.
Inhalation: At ambient/normal handling temperatures (0-38° C), no adverse effects due to inhalation of vapor are expected.
Ingestion: DO NOT induce vomiting since it is important that no amount of the material should enter the lungs (aspiration). Keep at rest. Get prompt medical attention.
Notes to Physician: Not available.

V – Fire Fighting Measures

Flash Point: 185° C
Method: COC DIN ISO 2592
Fire and Explosion Hazards: Combustible material, low hazard. The product can form flammable mixtures or can burn only on heating above the flash point. However, minor contamination by hydrocarbons of higher volatility may increase hazard.
Products of Combustion: Smoke, carbon monoxide and carbon dioxide.
Fire-Fighting Extinguishing Media: Foam, dry chemical powder, carbon dioxide.
Special Fire Fighting Procedures: Water fog or spray, to cool fire exposed surfaces (e.g.

containers and to protect personnel, should be used by personnel trained in fire fighting. Cut off "fuel"; depending on circumstances, either allow the fire to burn under controlled conditions or use foam or dry chemical powder to extinguish the fire. Respiratory and eye protection required for fighting personnel exposed to fumes or smoke.

VI – Accidental Release Measures

Person Precautions: See Section 8

Land Spill: Shut off source taking normal safety precautions. Prevent liquid from entering sewers, water courses, and low lying areas; advise the relevant authorities if it has, or if it contaminates soil/vegetation. Take measure to minimize the effects on ground water. Recover by skimming or pumping using explosion-proof equipment, or contain spilled liquid with booms, sand, or other suitable absorbent and remove mechanically into containers. If necessary, dispose of absorbed residues as directed in Section 13.

Water Spill: Confine the spill immediately with booms. Notify port and other relevant authorities. Remove from the surface by skimming or with suitable absorbents. Disperse the residue in unconfined waters, if permitted by local authorities and environmental agencies.

VII – Handling and Storage

Intended uses: Technical grade white oil (instrument lubricant)

Storage: Store the product in cool, well ventilated surroundings, well away from sources of ignition. Provide suitable mechanical equipment for the safe handling of drums and heavy packages. Electrical equipment and fittings must comply with local regulations regarding fire prevention with this class of product.

Load/Unload Temperature: Ambient to max. 60° C

Storage Temperature: Ambient to max. 50° C

Special Precautions: Keep containers closed when not in use. Prevent spills and leakages to avoid a slipping hazard.

VIII – Exposure Controls / Personal Protection

Occupational Exposure Limit: ACGIH recommends a TWA of 5 mg/m³ and a 15-minute STEL of 10 mg/m³ for oil mist (monitoring method; NIOSH 5026).

Personal Protection: In open systems where contact is likely, wear safety glasses with side shields. When concentrations in air may exceed the occupational exposure limit, and where engineering, work practices, or other means of exposure reduction are not adequate, approved respirators may be required.

Environmental Controls: See Section 7.

IX – Physical and Chemical Properties

General Appearance: Clear colorless liquid, neutral odor

Important Health, Safety, and Environmental Information:

Density: 0.86 g/ml at 15° C DIN 51 757

Boiling Range: 250° C IBP (greater than)

Viscosity: 14 mm²/S at 40° C DIN 51562

Vapor Density: Heavier than air (at 1 BAR)

Evaporation Rate: Non-volatile

Solubility in Water: Negligible

pH: Not Applicable
Flash Point: 185° C
Method: COC DIN ISO 2592
Flammability Limits in Air, % By Volume: LEL: 0.60 UEL: 6.50 (approx.)
Partition Coefficient: Not available
Autoignition Temperature: Not available

Other Information:

DMSO Extract % by Weight: Not applicable

X – Stability and Reactivity

Stability (Thermal, Light, Etc.): Stable

Conditions to Avoid: Keep away from heat sources, open flames and other sources of ignition.

Incompatible Materials: Avoid contact with strong oxidants such as liquid chlorine and concentrated oxygen.

Hazardous Decomposition Products: Smoke, and carbon monoxide may be formed in the event of incomplete combustion. Product will not decompose at ambient temperature.

XI – Toxicological Information

Effects of Over Exposure:

Inhalation: No hazard in normal industrial use.

Skin Contact: Not considered to be a hazard.

Eye Contact: Not considered to be a hazard.

Ingestion: No hazard in normal industrial use. Minute amounts aspirated into the lungs during ingestion or vomiting may cause severe pulmonary injury and death.

Chronic: Contains lubricating oil base stocks. Base oils of similar composition and refining history have exhibited no carcinogenic activity in laboratory animals.

Toxicity Data:

Acute: Not test data are available for this product. The potential health hazards were therefore derived from what is known of the toxicity of base oils in general. The general effects of base oils of this type are well known and are described in numerous publications including CONCAWE Report 5/87 "Health Aspects of Lubricants".

Chronic: Although there is no specific test data on the base oil components, the base oil would not be expected to exhibit carcinogenic potential based upon what is known of the toxicity of base oils in general.

XII – Ecological Information

Environmental Fate and Effects:

Ecotoxicity: Available ecotoxicity data (LL50>1000 mg/L) indicates that adverse effects to aquatic organisms are not expected from this product.

Mobility: When released into the environment, absorption to sediment and soil will be the predominant behavior.

Persistence and Degradability: This product is expected to be inherently biodegradable.

Bioaccumulative Potential: Bioaccumulation is unlikely due to the very low water

solubility of this product; therefore bioavailability to aquatic organisms is minimal.

XIII – Disposal Considerations

Collect and dispose of waste product at an authorized disposal facility, in conformance with national and local regulations, and in accordance with EEC Directive on the disposal of waste oil.

EU Waste Disposal Code: 13 02 05 (Note: this code is assigned based upon the most common uses for this product and may not reflect contaminants resulting from actual use. Purchasers may need to reassign the waste disposal code based on actual use.)

XIV – Transportation Information

Usual Shipping Containers: Rail cars, tank trucks, drums.

Transport Temperature: Ambient to max 50° C.

International Transport Regulations: Not regulated for transport by: land under ADR/RID regulations, inland waterways under ADNR regulations, sea under IMP regulations and air under IATA regulations.

XV – Regulatory Information

Hazard Classification: Not regulated

XVI – Other Information

Note: While the information and recommendations set forth on this data sheet are believed to be accurate as received from our suppliers, RMO, Inc. makes no warranty with respect thereto and disclaims all liability from reliance thereon.