ROBINAIR

SPX Corporation
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Material Safety Data Sheet

Trade Name: Premium (High) Vacuum Pump Oil (13201, 13203, 13204)

Synonyms: Lubricating Oil

Date: 5/1/97

CAS No.: 64741-88-4
(Refer to Section 1)
ROBINAIR INDEX NO: 03

PHONE NO. (For info.)
(419) 485-5561
Chemtrec Emergency: (800) 424-9300

Material Hazard Evaluation

(Per OSHA Hazard Communication Standard [29 CFR Part 1910.1200]) (OHCS)

Health: Non-Hazardous (OHCS).

Precautionary Statement: None.

HMIS Rating[1]: Health 0 Flammability 1 Reactivity 0

1.0 Generic Composition / Components

Components	CAS #	%	Hazard Data
Refined Petroleum Oil(s)	64741-88-4	100	Oral LD50(rat): >15g/kg Eye: Practically Non-Irritating Skin: Practically Non-Irritating Thin LC50/4H(rat): >5,000 mg/m³

ATTN:
Gerald Wood

[1] Hazard Rating: least – 0; slight – 1; moderate – 2; high – 3; extreme – 4
Robinair assignment based on our evaluation per NFPA and NPCA guidelines.

NA – Not Applicable ND – No Data NE – Not Established

2.0 Physical Data

Physical Hazard Classification (Per 29 CFR Part 1910.1200)

No	Combustible	No	Flammable	No	Pyrophoric
No	Compressed Gas	No	Organic Peroxide	No	Reactivity
No	Explosive	No	Oxidizer	Yes	Stable

Boiling Point, 760 mmHg, °C(°F):	~373(~703)
Specific Gravity (60/60°F) (H_2O = 1):	0.87
Vapor Density (Air = 1):	>1
% Volatiles by Volume:	Negligible
Melting Point, °C(°F):	NA
Vapor Pressure, mmHg (25°C):	$\sim 4 \times 10^{-3}$
Solubility in H_2O, % by Weight:	Negligible
Evaporation Rate (Butyl Acetate = 1):	<1
pH of Undiluted Product:	NA
Appearance and Odor:	Faint yellow or amber liquid, bland odor

3.0 Fire and Explosion Data

Flash Point, COC, °C(°F)	224(435)
Flash Point, PMC, °C(°F)	218(424)
Fire Point, COC, °C(°F)	252(485)
NFPA Rating*	Health: 0 Flammability: 1 Reactivity: 0
Flammable Limits (% by volume in air)	Lower: NA Upper: NA
Extinguishing Media	CO_2, dry chemical, foam, water fog
Special Fire Fighting Procedure	None
Unusual Fire or Explosion Hazard	Water may cause frothing

4.0 Reactivity Data

Stability:	Stable
Conditions Contributing to Instability:	
Incompatibility:	None
Hazardous Decomposition Products: (thermal, unless otherwise specified)	Strong oxidants, strong acids, and caustics CO_2, CO
Conditions Contributing to Hazardous Polymerization:	None

* Hazard Rating: least = 0; slight = 1; moderate = 2; high = 3; extreme = 4
Robinair assignment based on our evaluation per NFPA guidelines.

NA = Not Applicable ND = No Data NE = Not Established

5.0 Spill or Leak Procedures

Procedures if Material is Spilled:

- Remove sources of heat or ignition, provide adequate ventilation, contain leak.
- *Small Spills:* Absorb with suitable material such as rags, straw or sand.
- *Large Spills:* Contain spill in earthen dikes for later recovery.
- Report spills as required to appropriate authorities.

Waste Disposal:

- It is the responsibility of the user to determine if the material is a hazardous waste at the time of disposal.
- Check before disposing to be sure you are in compliance with all applicable laws and regulations.
- Chemtrec/RCRA Emergency Hotline Number: 800-424-9346.

Protective Measures During Repair and Maintenance of Contaminated Equipment:

- Refer to Section VII – Special Protection Information.
- Avoid prolonged contact with used oil.
- Wash exposed skin thoroughly with soap and water.

6.0 Health Hazard Data

Health Hazard Classification

(Per 29 CFR Part 1910.1200)

No	Carcinogen	No	Corrosive
No	Animal Carcinogen	No	Irritant
No	Suspect Carcinogen	No	Sensitizer
No	Mutagen	No	Teratogen
No	Highly Toxic	No	Target Organ
No	Toxic		

Product listed as Carcinogen or Potential Carcinogen by:

NTP No IARC No OSHA No Other No

Toxicity Summary: Practically non-toxic.

Major Route(s) of Entry: Inhalation of incidental mists or vapors.

Acute Exposure Symptoms

Inhalation:	Low risk at ambient temperatures. In enclosed spaces or when hot, vapors may reach concentrations sufficient to cause drowsiness, dizziness, headache, nausea, or lung irritation. Mists above TLV may cause chemical pneumonitis.
Dermal Contact:	Transient, slight irritation.
Eye Contact:	Practically non-irritant.
Ingestion:	Low toxicity. Very large amounts may cause generalized depression, headache, drowsiness, nausea, vomiting or diarrhea. Small doses may produce irritation and diarrhea.

Chronic Exposure

Prolonged and/or frequent contact may cause drying, cracking (dermatitis) or folliculitis. Repeated, excessive exposure to mists or fumes may induce pulmonary irritation or chronic bronchitis.

Other Special Effects

None expected.

Medical Conditions Aggravated by Exposure

None.

First Aid and Emergency Procedures for Acute Effect

Inhalation:	Remove to fresh air. Respiratory support, if necessary. Seek medical aid.
Dermal:	Wash with soap and water. Do not wear heavily contaminated clothing before laundering.
Eyes:	Flush with large volumes of water. Seek physician if any complications arise.
Ingestion:	Do not induce vomiting. Seek medical aid.
Injection:	Subcutaneous injection is a medical emergency. Seek medical aid immediately.

Notes to Physician: Following ingestion at a viscosity of around 200 SUS (100°F), there may be a minimal risk of aspiration into the lungs. For quantities above a few drops, careful cuffed tube lavage may still be considered. Aspirated material may cause chemical pneumonitis or lipoid pneumonia. Subcutaneous or intramuscular injection requires prompt surgical debridement. If not familiar with technique, seek skilled advice.

7.0 Special Protection Information

Ventilation Requirements: Use in well ventilated area. In confined space, mechanical ventilation may be required to keep levels of certain components below mandated standards as evaluated by designated personnel.

Permitted Threshold Air Concentrations:

Mineral Oil Mist	TLV-TWA	5mg/m³	OSHA-PEL	5mg/m³
	TLV-STEL	10mg/m³	OSHA-STEL	ND
	TLV-Ceiling	ND	OSHA-Ceiling	ND
			OSHA-Peak	ND

Specific Personal Protective Equipment:

Respiratory:	Normally none required. If high vapor or mist concentrations expected, use respirator approved for organic vapors and mists.
Eyes:	Safety goggles, or chemical splash goggles if splashing is anticipated.
Dermal:	Oil impervious gloves if frequent or prolonged contact is expected.
Other Clothing or Equipment:	Wear body-covering work clothes to avoid prolonged or repeated exposure. Launder soiled work clothes before reuse.

8.0 Transportation and Special Precautions

Storage: Do not apply high heat or flame to container. Keep separate from strong oxidizing agents.

Caution: Empty containers may contain product residue which could include flammable or explosive vapors.

Consult appropriate Federal State and Local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers and/or waste residues of this product.

DOT Information

Proper Shipping Name:	Petroleum Lubricating Oil
Hazard Class:	Non-Hazardous
Hazard Identification Number:	None assigned
Placard:	None

9.0 Environmental Data

Product Name **Premium Vacuum Pump Oil**
(13203, 13204)

SARA TITLE III

Section 313 – Toxic Chemicals

This product does not contain toxic chemicals of Section 313 of Title III of Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

Components	CAS#	%
None		

Section 311 – Hazard Categories

Yes	Not Applicable	No	Fire Hazard
No	Acute (Immediate Health Hazard)	No	Sudden Release of Pressure Hazard
No	Chronic (Delayed Health Hazard)	No	Reactive Hazard

Section 302/(A) – Extremely Hazardous Substances

(RQ = Reportable Quantity)
(TPQ = Threshold Planning Quantity)

This product does not contain Extremely Hazardous Substances of Section 302/(A).

Component	CAS#	%	RQ lbs.	TPQ lbs.
None				

Clean Water Act

Under Section 311 (b) (4) of the Clean Water Act, discharges of crude oil and petroleum products in any kind or form to surface waters must be immediately reported to the National Response Center: 800-424-8802.

Comprehensive Environmental Response, Compensation & Liability Act (CERCLA) – Section 102 Hazardous Substances

Component	CAS#	%	RQ lbs.

Petroleum and petroleum fractions are excluded from the list of CERCLA hazardous substances by Section 101(14) of CERCLA.

New Jersey Worker & Community Right-to-Know Act

Petroleum Oil

10.0 Labeling

NOTE

This product has been determined not to be a physical or a health hazard as defined by the OSHA Hazard Communication Standard.

ALL STATEMENTS, INFORMATION, AND DATA PROVIDED IN THIS MATERIAL SAFETY DATA SHEET ARE BELIEVED TO BE ACCURATE AND RELIABLE, BUT ARE PRESENTED WITHOUT GUARANTEE, REPRESENTATION, WARRANTY, OR RESPONSIBILITY OF ANY KIND, EXPRESSED OR IMPLIED. ANY AND ALL REPRESENTATIONS AND/OR WARRANTIES OF MERCHANTIBILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE SPECIFICALLY DISCLAIMED. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION OR PRODUCTS FOR THEIR PARTICULAR PURPOSE.

Steve Moore
NAME

Safety & Environmental Administrator
TITLE

Steve Moore
SIGNATURE

11/3/98
DATE

NA – Not Applicable ND – No Data NE – Not Established