

Material Safety Data Sheet

The data herein are provided for hazard communication to our employees, our customers and their employees, and authorized regulatory agencies. For the intended purpose, this MSDS may be duplicated or the data transcribed to an alternative form. The information is given in good faith, but no guarantees or warranties expressed or implied, are made.

TRADE NAME: All Climate Vacuum Pump Oil (13203, 13204)	DATE PREPARED 9-19-85	ROBINAIR INDEX NO. 461.00-07	PHONE NO. (For Info.) (419) 485-5561 EMERGENCY PHONE NO.
MANUFACTURED BY: Sealed Power Corp. Robinair Division Robinair Way, Montpelier, OH 43543			
CHEMICAL FAMILY: Lubricating Oil	FORMULA: NA (Mixture)		

SECTION 1 — MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS — Chemical Name & Common Names (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	% *	CAS REGISTRY NUMBER	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED
Refined Petroleum Oil(s)	100	64742-56-9 64742-65-0		5mg/m ³	(mist)
Non-Hazardous Ingredients					
TOTAL	100				

* OPTIONAL NA - NOT APPLICABLE NDA - NO DATA AVAILABLE < LESS THAN > MORE THAN

ROBINAIR MATERIAL SAFETY DATA SHEET

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SECTION 2 — PHYSICAL/CHEMICAL CHARACTERISTICS

MELTING POINT °C(°F): NA	SPECIFIC GRAVITY (H ₂ O = 1) 0.87	EVAPORATION RATE (= 1) (Butyl Acetate = 1): <1
BOILING POINT 760 mm HG, °C(°F): 373 (703)	VAPOR DENSITY (AIR = 1) >1	VAPOR PRESSURE (mm Hg and Temperature) mmHG (25°C): <4X10 ⁻⁵
SOLUBILITY IN WATER Negligible	pH NDA	
WATER REACTIVE NA	VOLATILE BY VOLUME Negligible	
APPEARANCE AND ODOR Faint yellow or amber liquid, bland odor.		

SECTION 3 — FIRE AND EXPLOSION HAZARD DATA

FLASH POINT AND METHOD USED COC, °C(°F): 224(435) See Note 4	AUTO-IGNITION TEMPERATURE NDA	FLAMMABILITY LIMITS IN AIR % BY VOLUME	LEL NA	UEL NA
EXTINGUISHER MEDIA CO ₂ , dry chemical, foam or water fog.				
SPECIAL FIRE FIGHTING PROCEDURES NDA				
UNUSUAL FIRE AND EXPLOSION HAZARDS Water may cause frothing.				

SECTION 4 — REACTIVITY HAZARD DATA

STABILITY <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable	CONDITIONS TO AVOID NDA
INCOMPATIBILITY (Materials to Avoid) Strong Oxidants.	
HAZARDOUS DECOMPOSITION PRODUCTS (Thermal, unless otherwise specified): CO, CO ₂	
HAZARDOUS POLYMERIZATION <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not Occur	CONDITIONS TO AVOID NDA

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SECTION 5 — HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY	<input checked="" type="checkbox"/> Inhalation <input type="checkbox"/> Skin Absorption	<input checked="" type="checkbox"/> Ingestion <input type="checkbox"/> Not Hazardous	CARCINOGEN LISTED IN	<input type="checkbox"/> NTP <input type="checkbox"/> IARC Monograph	<input type="checkbox"/> OSHA See Note <input checked="" type="checkbox"/> Not Listed 5
THRESHOLD LIMIT VALUE (TLV) PERMISSIBLE EXPOSURE LIMIT (NDA) 5mg/m ³ As oil mist (ACGIH 1984-85; OSHA 1972)					

HEALTH HAZARDS

EFFECTS OF OVEREXPOSURE: ACUTE	
Eyes: May be mildly irritating. Practically non-irritating (0.7-1.7/110, Draize)	
Inhalation:	Low risk of inhalation. 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. LC50/4 H(RAT): >5,000 mg/m ³
Ingestion:	Generally low toxicity. Very large amounts may cause generalized depression, headache, drowsiness, nausea, vomiting or diarrhea. Small doses may produce irritation and diarrhea. LD50 (RAT): >15g/Kg See Note 2
Skin:	Dermal Contact: Low irritant. Absorption: No probable acute hazard. Non-irritating or practically non-irritating (0-0.6/8, Draize)

EFFECTS OF OVEREXPOSURE: CHRONIC	
Eyes: None expected	
Inhalation:	None expected
Ingestion:	None expected
Skin:	Prolonged and/or frequent contact may cause drying, cracking (Dermatitis) or Folliculitis.

EMERGENCY FIRST AID PROCEDURES - Seek medical assistance for further treatment, observation and support if necessary.

Eyes: Flush with large volumes of water. See physician if any complications arise.	
Inhalation: Remove to fresh air. Respiratory support if necessary. Seek medical aid.	
Ingestion: Do not induce vomiting. Seek medical aid. See Note 1	
Skin: Wash with soap and water. Do not wear heavily contaminated clothing before laundering. Injection: Subcutaneous injection is a medical emergency. Seek medical aid immediately. See Note 1	

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SECTION 6 — CONTROL AND PROTECTIVE MEASURES

RESPIRATORY PROTECTION (Specify Type)	Normally none required. If high vapor or mist concentrations expected - use respirator NIOSH/MSHA approved is required.			
PROTECTIVE GLOVES	Oil impervious gloves	EYE PROTECTION	Safety goggles, or chemical splash goggles	
VENTILATION TO BE USED	<input checked="" type="checkbox"/> Local Exhaust below TLV To keep mists	<input type="checkbox"/> Mechanical (general)	NDA	<input type="checkbox"/> Special
	<input checked="" type="checkbox"/> Other (Specify) Very high mist concentrations can result in a fire and explosion hazard.			
OTHER PROTECTIVE CLOTHING AND EQUIPMENT	Wear body-covering work clothes to avoid prolonged or repeated exposure.			
HYGIENIC WORK PRACTICES	Laundry soiled work clothes before reuse.			

SECTION 7 — SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Review current local, state and federal laws, codes, statutes and regulations to determine the appropriate agencies to be notified, and the conditions under which they should be notified (See also Sections 1, 4 & 6).

Remove sources of heat or ignition, provide adequate ventilation, contain leak. Absorb small spills with suitable material such as rags, straw or sand. Report spills as required to appropriate authorities.

Protective Measures During Repair and Maintenance of Contaminated Equipment: Refer to Section 6 - Special Protection Information. Avoid prolonged contact with used oil, wash skin thoroughly with soap and water.

WASTE DISPOSAL METHOD: Review current local, state and federal statutes, codes, laws and regulations to determine the current status and appropriate disposal method for the ingredients listed in Section 1.

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. See Note 3

ROBINAIR MATERIAL SAFETY DATA SHEET

PAGE 5 OF 6

TRADE NAME: All Climate Vacuum Pump Oil	DATE PREPARED 9-19-85	ROBINAIR INDEX NO. 461.00-07	PHONE NO. (For info.) (419) 485-5561
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SECTION 8 — PRECAUTIONS FOR SAFE HANDLING AND TRANSPORTATION

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Store below 120°F. Do not apply high heat or flame to container. Keep separate from strong oxidizing agents.

OTHER PRECAUTIONS AND/OR SPECIAL HAZARDS

Caution:

Empty containers may contain product residue which could include flammable or explosive vapors. See Note 3

DOT INFORMATION:

DOT/UN Shipping Name: Petroleum Lubricating Oil
DOT Hazard Class: Non-Hazardous
DOT/UN Hazard Identification Number: None assigned
DOT Shipping Container Restrictions: None

Hazardous Material Placard/Label: None

NFPA Rating * Health <u>1</u> Flammability <u>1</u> Reactivity <u>0</u> Special _____	HMIS Rating * Health _____ Flammability _____ Reactivity _____ Personal Protection _____
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NOTES

- Notes to Physician: If viscosity is less than 100 SUS at 100°F, careful gastric lavage with tight fitting or cuffed tube is to be preferred over emesis.
If viscosity is greater than 100 SUS at 100°F, emesis may be induced for large quantities.
Aspiration may cause chemical pneumonitis or lipid pneumonia.
Subcutaneous injection requires prompt surgical debridement.
If not familiar with technique, seek skilled advise. SUS Viscosity at 100°F = 200.
- Toxicity Summary: Slightly toxic, 1 pt. to 1 qt. is approximate lethal oral dose for 150 lb. human adult.
- Consult appropriate Federal, State, and Local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers and/or waste residues of this product.

* OPTIONAL

NA - NOT APPLICABLE

NDA - NO DATA AVAILABLE

< LESS THAN

> MORE THAN

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NOTES

- 4. Flash Point, PM, °C(°F): 218(424)
Fire Point, COC, °C(°F): 252(485)
- 5. The base stocks used in "All Climate Vacuum Pump Oil" are best characterized by Class 3 (Severely Solvent- Refined Oils), and do not require carcinogenic labeling under OSHA's Hazard Communication Standard. This product is not listed as a carcinogen or potential carcinogen by NTP, IARC, or by OSHA.

* OPTIONAL NA - NOT APPLICABLE NDA - NO DATA AVAILABLE < LESS THAN > MORE THAN

D. P. Schrock

NAME
Director of Manufacturing and Distribution

TITLE
D. P. Schrock

6-18-86

SIGNATURE

DATE



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