

**Premium (High) Vacuum Pump Oil  
Material Safety Data Sheet**SPX Corporation  
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Owatonna, MN 55060-0995 USA

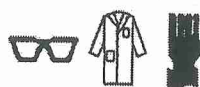
MSDS No. 907020

Revision Date 02/12/2003

**IMPORTANT:** Read this MSDS before handling or disposing of this product and pass this information on to employees, customers and users of this product.**Emergency Overview**Physical State Liquid.  
Color Clear to light amber. Odor Mild petroleum odorProtect eyes from misting or spraying material.  
Protect exposed skin from repeated or prolonged exposure.  
Do not store material in open or unmarked containers.  
Spills may create a slipping hazard.**Hazard Rankings**

	HMIS	NFPA
Health Hazard	0	0
Fire Hazard	1	1
Reactivity	0	0

\* = Chronic Health Hazard

**Protective Equipment**Minimum Recommended  
See Section 8 for Details**SECTION 1: IDENTIFICATION**

Trade Name	Premium (High) Vacuum Pump Oil	Technical Contact	(800) 248-4684
Product Number	13119, 13203, 13204	Medical Emergency	(918) 495-4700
CAS Number	Mixture.	CHEMTREC Emergency (United States Only)	(800) 424-9300
Product Family	Lubricating oil		
Synonyms	Lubricating oil		

**SECTION 2: COMPOSITION**

Component Name(s)	CAS Registry No.	Concentration (%)
1) Distillates, petroleum, solvent-refined heavy paraffinic	64741-88-4	100

**SECTION 3: HAZARDS IDENTIFICATION**

Also see Emergency Overview and Hazard Ratings on the top of Page 1 of this MSDS.

Major Route(s) of Entry Skin contact.

**Signs and Symptoms of Acute Exposure**

Inhalation	No significant adverse health effects are expected to occur upon short-term exposure.
Eye Contact	This product can cause transient mild eye irritation with short-term contact with liquid sprays or mists.
Skin Contact	This material can cause mild skin irritation from prolonged or repeated skin contact. Injection under the skin can cause inflammation and swelling. Injection of pressurized hydrocarbons can cause severe, permanent tissue damage. Initial symptoms may be minor. Injection of petroleum hydrocarbons requires immediate medical attention.

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- Ingestion** If swallowed, large volumes of material can cause generalized depression, headache, drowsiness, nausea, vomiting and diarrhea. Smaller doses can cause a laxative effect. If aspirated into the lungs, liquid can cause lung damage.
- Chronic Health Effects Summary** Contains a petroleum-based mineral oil. Prolonged or repeated skin contact can cause mild irritation and inflammation characterized by drying, cracking, (dermatitis) or oil acne. Repeated or prolonged inhalation of petroleum-based mineral oil mists at concentrations above applicable workplace exposure levels can cause respiratory irritation or other pulmonary effects.
- Conditions Aggravated by Exposure** Medical conditions aggravated by exposure to this material may include pre-existing skin disorders.
- Target Organs** This material may cause damage to the following organs: skin.
- Carcinogenic Potential** This product does not contain any components at concentrations above 0.1% which are considered carcinogenic by OSHA, IARC or NTP.

OSHA Hazard Classification is indicated by an "X" in the box adjacent to the hazard title. If no "X" is present, the product does not exhibit the hazard as defined in the OSHA Hazard Communication Standard (29 CFR 1910.1200).					
OSHA Health Hazard Classification		OSHA Physical Hazard Classification			
Irritant <input type="checkbox"/>	Toxic <input type="checkbox"/>	Combustible <input type="checkbox"/>	Explosive <input type="checkbox"/>	Pyrophoric <input type="checkbox"/>	
Sensitizer <input type="checkbox"/>	Highly Toxic <input type="checkbox"/>	Flammable <input type="checkbox"/>	Oxidizer <input type="checkbox"/>	Water-reactive <input type="checkbox"/>	
Corrosive <input type="checkbox"/>	Carcinogenic <input type="checkbox"/>	Compressed Gas <input type="checkbox"/>	Organic Peroxide <input type="checkbox"/>	Unstable <input type="checkbox"/>	

### SECTION 4: FIRST AID MEASURES

Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.

- Inhalation** Vaporization is not expected at ambient temperatures. This material is not expected to cause inhalation-related disorders under anticipated conditions of use. In case of overexposure, move the person to fresh air.
- Eye Contact** Check for and remove contact lenses. Flush eyes with cool, clean, low-pressure water while occasionally lifting and lowering eyelids. Seek medical attention if excessive tearing, redness, or pain persists.
- Skin Contact** If burned by hot material, cool skin by quenching with large amounts of cool water. For contact with product at ambient temperatures, remove contaminated shoes and clothing. Wipe off excess material. Wash exposed skin with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists. Thoroughly clean contaminated clothing before reuse. Discard contaminated leather goods. If material is injected under the skin, seek medical attention immediately.
- Ingestion** Do not induce vomiting unless directed to by a physician. Do not give anything to drink unless directed to by a physician. Never give anything by mouth to a person who is not fully conscious. If significant amounts are swallowed or irritation or discomfort occurs, seek medical attention immediately.
- Notes to Physician** The viscosity range of the product represented by this MSDS is 100 to 400 SUS at 100°F. Accordingly, upon ingestion there is a low to moderate risk of aspiration. Careful gastric lavage may be considered to evacuate large quantities of material. Subcutaneous or intramuscular injection requires prompt surgical debridement.

### SECTION 5: FIRE FIGHTING MEASURES

- NFPA Flammability Classification** NFPA Class-IIIB combustible material. Slightly combustible!
- Flash Point Method** CLOSED CUP: 208°C (406.4°F)(Pensky-Martens. (Minimum)) OPEN CUP: 215°C (419°F)(Cleveland. (Minimum)).
- Lower Flammable Limit** No data. **Upper Flammable Limit** No data.
- Autoignition Temperature** Not available.

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<b>Hazardous Combustion Products</b>	Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and trace oxides of sulfur and/or nitrogen.
<b>Special Properties</b>	This material can burn but will not readily ignite. This material will release vapors when heated above the flash point temperature that can ignite when exposed to a source of ignition. In enclosed spaces, heated vapor can ignite with explosive force. Mists or sprays may burn at temperatures below the flash point.
<b>Extinguishing Media</b>	Use dry chemical, foam, Carbon Dioxide or water fog.
<b>Protection of Fire Fighters</b>	Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Emergency Overview on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this MSDS.

Do not touch damaged containers or spilled material unless wearing appropriate protective equipment. Slipping hazard; do not walk through spilled material. Stop leak if you can do so without risk. For small spills, absorb or cover with dry earth, sand, or other inert non-combustible absorbent material and place into waste containers for later disposal. Contain large spills to maximize product recovery or disposal. Prevent entry into waterways or sewers. In urban area, cleanup spill as soon as possible. In natural environments, seek cleanup advice from specialists to minimize physical habitat damage. This material will float on water. Absorbent pads and similar materials can be used. Comply with all laws and regulation

### **SECTION 7: HANDLING AND STORAGE**

<b>Handling</b>	Avoid contamination and extreme temperatures to minimize product degradation. Empty containers may contain product residues that can ignite with explosive force. Do not pressurize, cut, weld, braze solder, drill, grind or expose containers to flames, sparks, heat or other potential ignition sources. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers and/or waste residues of this product.
<b>Storage</b>	Keep container closed. Do not store with strong oxidizing agents. Do not store at elevated temperatures. Avoid storing product in direct sunlight for extended periods of time. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers or waste residues of this product.

### **SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION**

<b>Engineering Controls</b>	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits (see below). An eye wash station and safety shower should be located near the work-station.
<b>Personal Protective Equipment</b>	Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following pictograms represent the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.



<b>Eye Protection</b>	Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Wear goggles and/or face shield if splashing or spraying is anticipated. Wear goggles and face shield if material is heated above 125°F (51°C). Have suitable eye wash water available.
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<b>Hand Protection</b>	Use gloves constructed of chemical resistant materials such as neoprene or heavy nitrile rubber if frequent or prolonged contact is expected. Use heat-protective gloves when handling product at elevated temperatures.
<b>Body Protection</b>	Use clean and impervious protective clothing (e.g., neoprene or Tyvek®) if splashing or spraying conditions are present. Protective clothing may include long-sleeve outer garment, apron, or lab coat. If significant contact occurs, remove oil-contaminated clothing as soon as possible and promptly shower. Launder contaminated before reuse or discard. Wear heat protective boots and protective clothing when handling material at elevated temperatures.
<b>Respiratory Protection</b>	Vaporization is not expected at ambient temperatures. Therefore, the need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).
<b>General Comments</b>	Use good personal hygiene practices. Wash hands and other exposed skin areas with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities, or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners. Since specific exposure standards/control limits have not been established for this product, the "Oil Mist, Mineral" exposure limits shown below are suggested as minimum control guidelines.

### Occupational Exposure Guidelines

<b>Substance</b>	<b>Applicable Workplace Exposure Levels</b>
1) Oil Mist, Mineral	<b>ACGIH (United States).</b> TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup> <b>OSHA (United States).</b> TWA: 5 mg/m <sup>3</sup>

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (TYPICAL)

<b>Physical State</b>	Liquid.	<b>Color</b>	Clear to light amber.	<b>Odor</b>	Mild petroleum odor
<b>Specific Gravity</b>	0.87 (Water = 1)	<b>pH</b>	Not applicable.	<b>Vapor Density</b>	>1 (Air = 1)
<b>Boiling Point/Range</b>	Not available.			<b>Melting/Freezing Point</b>	Not available.
<b>Vapor Pressure</b>	<0.001 kPa (<0.01 mmHg) (at 20°C)			<b>Viscosity (cSt @ 40°C)</b>	31
<b>Solubility in Water</b>	Insoluble in cold water.			<b>Volatile Characteristics</b>	Negligible volatility
<b>Additional Properties</b>	Gravity, JAPI (ASTM D287) = 31.1 @ 60°F Density = 7.25 Lbs/gal. Viscosity (ASTM D2161) = AP 150 SUS @ 100°F				

## SECTION 10: STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable.	<b>Hazardous Polymerization</b>	Not expected to occur.
<b>Conditions to Avoid</b>	Keep away from extreme heat, sparks, open flame, and strongly oxidizing conditions.		
<b>Materials Incompatibility</b>	Strong oxidizers.		
<b>Hazardous Decomposition Products</b>	No additional hazardous decomposition products were identified other than the combustion products identified in Section 5 of this MSDS.		

## SECTION 11: TOXICOLOGICAL INFORMATION

For other health-related information, refer to the Emergency Overview on Page 1 and the Hazards Identification in Section 3 of this MSDS.

**Toxicity Data**  
**Distillates, petroleum, solvent-refined heavy paraffinic:**  
 ORAL (LD50): Acute: >5000 mg/kg [Rat].  
 DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].

**Distillates, petroleum, solvent-refined heavy paraffinic:**  
 Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects. In long term studies (up to two years) no carcinogenic effects have been reported in any animal species tested. Analyses conducted by method IP 346 indicate that the polycyclic aromatic concentration of this mineral oil is below 3.0 weight percent.

## SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity** Analysis for ecological effects has not been conducted on this product. However, if spilled, this product and any contaminated soil or water may be harmful to human, animal, and aquatic life. Also, the coating action associated with petroleum and petroleum products can be harmful or fatal to aquatic life and waterfowl.

**Environmental Fate** An environmental fate analysis has not been conducted on this specific product. Plants and animals may experience harmful or fatal effects when coated with petroleum-based products. Petroleum-based (mineral) lube oils will normally float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway may be sufficient to cause a fish kill or create an anaerobic environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

Conditions of use may cause this material to become a "hazardous waste", as defined by federal or state regulations. It is the responsibility of the user to determine if the material is a RCRA "hazardous waste" at the time of disposal. Transportation, treatment, storage and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR 260 through 40 CFR 271). State and/or local regulations may be more restrictive. Contact the RCRA/Superfund Hotline at (800) 424-9346 or your regional US EPA office for guidance concerning case specific disposal issues.

## SECTION 14: TRANSPORT INFORMATION

The shipping description below may not represent requirements for all modes of transportation, shipping methods or locations outside of the United States.

<b>US DOT Status</b>	Not regulated by the U.S. Department of Transportation as a hazardous material.		
<b>Proper Shipping Name</b>	Not regulated.		
<b>Hazard Class</b>	Not regulated.	<b>Packing Group(s)</b>	Not applicable.
		<b>UN/NA ID</b>	Not regulated.
<b>Reportable Quantity</b>	A Reportable Quantity (RQ) has not been established for any components of this material.		
<b>Placards</b>			

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DISCLAIMER OF LIABILITY

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\*\*\*\*\* END OF MSDS \*\*\*\*\*