



ZORN COMPRESSOR & EQUIPMENT INC.

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MATERIAL SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

Distributor's Name: **ZORN
COMPRESSOR & EQUIPMENT INC.**

CAS Number: MIXTURE

MSDS Code: 633420001

Address: **1335 E WISCONSIN AVE
PEWAUKEE WI 53072-3717**

HAZARD RANKINGS

Emergency Telephone No.: **(918) 495-4700**

	HMIS	NFPA
HEALTH HAZARD:	1	0
FIRE HAZARD:	1	1
REACTIVITY:	0	0

Trade Name: **S120P Air Compressor Oil**

By: TECHNICAL SERVICES
(800) 248-4684

EFFECTIVE DATE: APRIL 13, 2004
SUPERSEDES DATE: DECEMBER 19, 2001

2. INGREDIENTS

Component Name	CAS No.	Concentration (%)
DISTILLATES, PETROLEUM, SOLVENT-REFINED HEAVY PARAFFINIC	64741-88-4	80-100
DISTILLATES, PETROLEUM, SOLVENT-REFINED LIGHT PARAFFINIC	64741-89-5	0 - 20
PROPRIETARY INGREDIENTS	PROPRIETARY MIXTURE	0-2
ZINC AND ZINC COMPOUNDS	68649-42-3	0-1

This product is NOT HAZARDOUS according to OSHA 29 CFM 1910-1200.

3. HEALTH EFFECT INFORMATION

Eye Contact:	This product can cause transient mild eye irritation with short-term contact with liquid sprays or mists. Symptoms include stinging, watering, redness, and swelling
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
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.
Conditions Aggravated by Exposure:	Disorders of the following organs or organ systems that may be aggravated by significant exposure to this material or its components include: skin.
Target Organs	May cause damage to the following organs: skin.
Carcinogenic Potential	This product is not known to contain any components at concentrations above 0.1% which are considered carcinogenic by OSHA, IARC or NTP

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.

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.
Inhalation:	Move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If breathing is difficult, 100 percent humidified oxygen should be administered by a qualified individual. Seek medical attention immediately. Keep the affected individual warm and at rest.
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. Seek medical attention immediately.
Notes to Physician:	<p>SKIN: In the event of injection in underlying tissue, immediate treatment should include extensive incision, debridement and saline irrigation. Inadequate treatment can result in ischemia and gangrene. Early symptoms may be minimal.</p> <p>INGESTION: The viscosity range of the product(s) represented by this MSDS is greater than 100 SUS at 100°F. There is a low risk of aspiration upon ingestion. Careful gastric lavage or emesis may be considered to evacuate large quantities of material.</p>

5. FIRE FIGHTING MEASURES

Flash Point: Open cup: 220 °C (428 °F) (Cleveland).

Autoignition Temperature: NOT AVAILABLE. **Test Method:** NO INFORMATION AVAILABLE

Flammable Limits in Air % by Volume **Lower:** NO DATA AVAILABLE **Upper:** NO DATA AVAILABLE

NFPA Flammability Classification: NFPA Class-III B combustible material

Extinguishing Media: Use dry chemical foam, Carbon Dioxide or water fog.

Special Properties 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.

Protection of Fire Fighters 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.

Hazardous Combustion Products: Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and trace oxides of sulfur, phosphorus, zinc and/or nitrogen.

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 regulations.

7. HANDLING AND STORAGE INFORMATION

Handling:

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 water residues of this product.

Storage:

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 water residues of this product.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Guidelines:

Applicable Workplace Exposure Levels
ACGIH (United States): TWA: 5 mg/m³ STEL: 10 mg/m³
OSHA (United States): TWA: 5 mg/m³

Personal Protective Equipment:

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. Eye protection, gloves, and clothing protector are the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.

Eye Protection:

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.

Hand Protection:

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.

Respiratory Protection:

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 or respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).

Body Protection:

Use clean 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 clothing before reuse or discard. Wear heat protective boots and protective clothing when handling material at elevated temperatures.

Engineering Controls

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 workstation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color: Clear to light amber	
Odor: Mild Petroleum odor	Vapor Pressure: <0.001 kPa (<0.01 mm Hg) (@ 20° C)
Physical State: LIQUID	Vapor Density (air=1): >1
pH: Not Applicable	Volatility: Negligible volatility
Boiling Range: Not Available	Density: 7.29 LBS/GAL
Melting/Freezing Point: No Data Available	Viscosity (ASTM D2161): 240 SUS @ 100°F
Specific Gravity: 0.87 (Water = 1)	Viscosity (cSt @ 40°C): 47
Solubility in Water: Insoluble in cold water	Gravity, °API (ASTM D287): 30.2 @ 60°F

10. STABILITY AND REACTIVITY INFORMATION

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

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: >5000mg/kg [Rat].
 DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].

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, lipid granuloma formation and lipid pneumonia. In acute had 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 concentration of DMSO extractables in this mineral oil is below 3.0 weight percent.

11. TOXICOLOGICAL INFORMATION cont.

Distillates, petroleum, solvent-refined light paraffinic:

ORAL (LD50): Acute: >5000mg/kg [Rat].
DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].

Toxicity Data Cont...:

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 had 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 concentration of DMSO extractables in this mineral oil is below 3.0 weight percent.

Hydraulic oil:

Repeated or prolonged skin contact with certain hydraulic oils can cause mild skin irritation characterized by drying, cracking (dermatitis) or oil acne. Injection under the skin, in muscle or into the blood stream can cause irritation, inflammation, swelling, fever, and systemic effects, including mild central nervous system depression. Injection of pressurized hydrocarbons can cause severe, permanent tissue damage.

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 is not available for 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 can result in a loss of marine life or create an anaerobic environment. This material contains phosphorus which is a controlled element for disposal in effluent waters in most sections of North America. Phosphorus is known to enhance the formation of algae. Severe algae growth can reduce oxygen content in the water possibly below levels necessary to support marine life.

13. DISPOSAL INFORMATION

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 "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. Empty drums and pails retain residue. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose this product's empty container to heat, flame, or other ignition sources. DO NOT attempt to clean it. Empty drums and pails should be drained completely, properly bunged or sealed, and promptly sent to a reconditioner.

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.

US DOT Status	Not regulated by the U.S. Department of Transportation as a hazardous material		
Proper Shipping Name	Not Regulated		
Hazard Class	Not Regulated	Packing Group(s)	Not Applicable
		UN/NA Number	Not Regulated
Reportable Quantity	A Reportable Quantity (RQ) has not been established for this material		
	Emergency Response Guide No.	Not Applicable	
	HAZMAT STCC No.	2911415	
	MARPOL III Status	Not a DOT "Marine Pollutant" per 49 CFR 171.8.	

15. REGULATORY INFORMATION

TSCA Inventory:	This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory
SARA 302/304 Emergency Planning and Notification	The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 335. No components were identified
SARA 311/312 Hazard Identification	<p>The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories:</p> <p>No SARA 311/312 hazard categories identified.</p>
SARA 313 Toxic Chemical Notification and Release Reporting	This product contains the following components in concentrations above de minimis levels that are listed as toxic chemicals in 40 CFR Part 372 pursuant to the requirements of Section 313 or SARA: No components were identified
CERCLA	<p>The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQs) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are:</p> <p>Zinc and Zinc Compounds, Concentration: 0 – 1%</p>
Clean Water Act (CWA)	This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters must be reported to the EPA's National Response Center at (800) 424.8802.
California Proposition 65	<p>This material may contain the following components which are known to the State of California to cause cancer, birth defects or other reproductive harm, and may be subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):</p> <p>Toluene: <0.002% Ethyl Acrylate: 0.0002%</p>
New Jersey Right-to-Know Label	Petroleum Oil (Hydraulic Oil)
Additional Regulatory Remarks	No additional regulatory remarks.

DISCLAIMER OF LIABILITY

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