



VAPCO PRODUCTS, INC.

Safety Data Sheet Vacuum Pump Oil

SECTION 1: Identification

1.1 GHS Product identifier

Product name	Vacuum Pump Oil
Product number	VPO350-1P, VPO350-1Q, VPO350-1, VPO350-55
Brand	Vapco

1.3 Recommended use of the chemical and restrictions on use Vacuum pump oil

1.4 Supplier's details

Name	Vapco Products, Inc.
Address	401 Marshall Road Valley Park, Missouri 63088 United States
Telephone	(636) 923-2121
Fax	(636) 923-3002
email	info@VapcoProducts.com

1.5 Emergency phone number

(800) 255-3924

SECTION 2: Hazard identification

General hazard statement

Note: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200, 2024)

Not a hazardous substance or mixture.

Safety Data Sheet

2.2 GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Other hazards which do not result in classification

Not a hazardous substance or mixture.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. Phenol, 2,6-bis(1,1-dimethylethyl)-

Concentration 0.1 - 0.25 % (weight)
CAS no. 128-39-2

2. Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts

Concentration 0.1 - 1 % (weight)
CAS no. 68649-42-3

Trade secret statement (OSHA 1910.1200(i))

All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
Other ingredients determined not to be hazardous up to 100%.

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
If inhaled	First, take proper precautions to ensure your own safety before attempting rescue (e.g. wear appropriate respiratory protective equipment, use the buddy system), then remove the exposed person to fresh air. Keep at rest in a position comfortable for breathing. Get medical advice/attention.
In case of skin contact	Immediately drench affected area with water for at least 15 minutes. Remove contaminated clothing immediately. Obtain medical attention if irritation develops or persists.
In case of eye contact	Immediately rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.
If swallowed	Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2 Most important symptoms/effects, acute and delayed

N/A

Safety Data Sheet

4.3 Indication of immediate medical attention and special treatment needed, if necessary

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Dry chemical, foam, water foam, or carbon dioxide (CO₂).

5.2 Specific hazards arising from the chemical

Pressurized mists may form a flammable mixture.

5.3 Special protective actions for fire-fighters

Precautionary Fire Measures: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use dry chemical, foam, or carbon dioxide (CO₂). Do not breathe fumes from fire or vapors from decomposition. Do NOT fight fire when fire reaches containers. Evacuate area. Fight fire remotely due to the risk of explosion. Shut off all sources of ignition. Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Wear NIOSH-approved Self-Contained Breathing Apparatus with a full face piece operated in a positive pressure demand mode with full body protective clothing when fighting fires.

Hazardous Combustion Products: Aldehydes, incomplete combustion products, oxides of carbon, smoke, fume, sulphur oxides.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe vapors, spray, mist, gas. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel. Stop leak if safe to do so.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedure: Eliminate ignition sources first, then ventilate the area. Evacuate unnecessary personnel, isolate, and ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2 Environmental precautions

Large Spills: Dyke far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and materials for containment and cleaning up

For Containment: Ventilate the area. Contain any spills with dikes or absorbents to prevent further migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Eliminate all ignition sources. Ventilate area. Stop the ignition source of the release, if safe to do so. Consider the use of water spray to disperse vapors. Isolate the area until gas has dispersed. Ventilate and gas test area before entering. Take up liquid spill into absorbent material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Waste Disposal: Dispose of in accordance with local, regional, national, and international regulations. Containers

Safety Data Sheet

may be hazardous when empty. Do not flame cut, braze, or weld. Product should be fully characterized prior to disposal (40 CFR 261).

Reference to other sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Additional Hazards When Processed: Do not pressurize, cut, or weld containers. Do not pierce or burn, even after use.

Precautions for Safe Handling: Do not handle until all safety precautions have been read and understood. Avoid contact with skin, eyes and clothing. Do not breathe gas, mist, spray, vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not spray on open flame or other ignition source.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

Other Precautions: Keep out of reach of children. Follow label instructions. Vapors may collect in low lying areas.

7.2 Conditions for safe storage, including any incompatibilities

Technical Measures: Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed. Material can accumulate static charges which may cause an electrical spark (ignition source). When the material is handled in bulk, an electrical spark could ignite any flammable vapors from liquids or residues that may be present (e.g., during switch-loading operations). Use proper bonding and/or earthing procedures. However, bonding and earthing may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising Out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity). This product is a static accumulator.

Storage Conditions: Store in a dry, cool place. Keep only in the original container in a cool, well-ventilated place away from ignition sources. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. The type of container used to store the material may affect static accumulation and dissipation. Store locked up/in a secure area.

Incompatible Materials: Strong oxidizers.

Material is defined under the National Standard [NOHSC: 1015] Storage and Handling of Workplace Dangerous Goods.

SECTION 8: Exposure controls/personal protection

8.2 Appropriate engineering controls

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Use explosion-proof equipment. Proper grounding procedures to avoid static electricity should be followed. Use only outdoors or in well-ventilated area. Ensure all local, regional, national, and international regulations are being observed. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Chemical safety goggles. Insufficient ventilation: wear respiratory protection. Respiratory protection of the dependent type.

Safety Data Sheet

Skin protection

Wear protective gloves and clothing.

Body protection

Wear suitable protective clothing. Wear protective gloves. Chemical resistant materials and fabrics. Wear fire/flamm resistant/retardant clothing.

Respiratory protection

Use a NIOSH-approved Self-Containing Breathing Apparatus whenever exposure may exceed established Occupational Exposure Limits.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Viscous liquid
Color	Pale yellow to brown
Odor	Characteristic
Odor threshold	N/D
Melting point/freezing point	N/D
Boiling point or initial boiling point and boiling range	>316°C (424°F)
Flammability	N/A
Lower and upper explosion limit/flammability limit	0.9-7.0% by volume
Flash point	>218°C (424°F)
Auto-ignition temperature	N/D
Decomposition temperature	N/D
pH	N/A
Kinematic viscosity	68 cSt (68 mm ² /sec) at 40°C; 8.5 cSt (8.5 mm ² /sec) at 100°C
Solubility	Negligible
Partition coefficient n-octanol/water (log value)	> 3.5
Vapor pressure	< 0.013 kPa (0.1 mmHg) at 20°C
Evaporation rate	N/D
Density and/or relative density	0.883
Relative vapor density	>2 at 101 kPa

Particle characteristics

Pour Point: -12°C (10°F)

DMSO Extract (mineral oil only), IP-346: <3% wt

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under normal conditions of use.

10.2 Chemical stability

Stable under normal conditions of use.

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

Safety Data Sheet

10.4 Conditions to avoid

Excessive heat. High energy sources of ignition.

10.5 Incompatible materials

Strong oxidizers.

10.6 Hazardous decomposition products

Material does not decompose at ambient temperatures.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Minimally toxic based on assessment of the compounds.

Skin corrosion/irritation

Negligible irritation to skin at ambient temperatures based on assessment of the components.

Serious eye damage/irritation

May cause mild, short-lasting discomfort to eyes based on assessment of the components.

Respiratory or skin sensitization

Not expected to be a respiratory or skin sensitizer based on assessment of the components.

Germ cell mutagenicity

Not expected to be a germ cell mutagen based on assessment of the components.

Carcinogenicity

Not expected to cause cancer based on the assessment of the components.

Reproductive toxicity

Not expected to be a reproductive toxicant based on assessment of the components.

Specific target organ toxicity (STOT) - single exposure

Not expected to cause organ damage from a single exposure.

Specific target organ toxicity (STOT) - repeated exposure

Not expected to cause organ damage from prolonged or repeated exposure based on assessment of the components.

Aspiration hazard

Not expected to be an aspiration hazard based on assessment of the components.

Additional information

Contains: Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitizing in test animals. IARC Classification: The following ingredients are cited in the lists below: None.

Safety Data Sheet

SECTION 12: Ecological information

Toxicity

Material not expected to be harmful to aquatic organisms.

Persistence and degradability

Base oil component expected to be inherently biodegradable.

Bioaccumulative potential

Base oil component has the potential to bioaccumulate, however metabolism or physical properties may reduce the bio-concentration or limit bio-availability.

Mobility in soil

Base oil component of low solubility and floats and is expected to migrate from water to the land and is expected to partition to sediment and waste-water solids.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Dispose of contents/container in accordance with local, regional, national, and international regulations. Do not pierce or burn, even after use.

Packaging disposal

Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

Other disposal recommendations

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products. Protect the environment. Dispose of used oil at designated sites. Minimize skin contact. Do not mix used oils with solvents, brake fluids or coolants.

SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

Safety Data Sheet

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

US EPA TSCA public inventory

Chemical name: Phenol, 2,6-bis(1,1-dimethylethyl)-

CAS number: 128-39-2

Chemical name: Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts

CAS number: 68649-42-3

SECTION 16: Other information

N/A = Not applicable; N/D = Not determined

16.1 Further information/disclaimer

To the best of our knowledge, information contained herein is accurate. However there is no assumption of liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazard which exists. The information contained in this SDS was obtained from current and reliable sources; however, the data is provided without warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions of handling, storage and disposal of this product are beyond the control of the manufacturer, the manufacturer will not be responsible for loss, injury, or expense arising out of the products improper use. No warranty, expressed or inferred, regarding the product described in this SDS shall be created or inferred by any statement in this SDS. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this SDS. The user is responsible for full compliance.

16.2 Preparation information

Prepared by: Jessica Wilson

Date prepared: 2-26-2025