Safety Data Sheet (SDS)

Product Name Rovac High Vacuum Pump Oil

Revision Date: Jun. 28,2025

SDS Number: 2501801

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Version: 3.0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Rovac High Vacuum Pump Oil

Supplier Name: Hardwaremise Sdn Bhd

Address: No 12, Jalan Bentara 1 , Taman Iskandar.80050 JB Johor, Malaysia

Contact: +6073343212

Email: sales@harwaremise.com.my

Further information obtainable from

Recommended use of the chemical and restrictions on use: Use for automobile.

Restrictions on use: Do NOT use it in an application which may contaminate food or do harm to human health.

2. HAZARDS IDENTIFICATION

Classification: Non-hazardous

GHS Label Element Symbol: No symbol

Signal Word: No signal word.

GHS Hazards Statement:

Physical hazards: Not classified as hazardous in accordance with GHS

Health hazards: Not classified as hazardous in accordance with GHS

Environmental hazards: Not classified as hazardous in accordance with GHS

GHS Precautionary Statements:

Preventive measures: Not available.

Response: Not available.

Safe storage: Not available.

Disposal: Not available.

Other Hazards Not Affecting the Classification: Not classified as flammable, but will burn.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Recipe Description: Synthetic base oils and additives.

4. First aid measures

General Information: Not a health hazard if used under normal conditions

Inhalation:

Dizziness or nausea is unlikely to occur;

If this happens, move the victim to fresh air

Get medical assistance if symptoms persist

Skin Contact:

Remove contaminated clothing. Flush exposed area with water and soap for cleaning

Get medical assistance if irritation persists.

It may be injected into the skin if high pressure equipment is used;

If this happens, immediately send the victim to the hospital without hesitation before it becomes worse.

Eye Contact: Flush eyes with plenty of water. Get medical aid if irritation persists.

Ingestion: Do not induce vomiting. Rinse mouth with water and seek medical advice.

Notes to Physician:

Treat symptomatically and supportively.

Causes chemical pneumonia if inhaled into the lungs.

Prolonged or repeated exposure to it may cause dermatitis.

Injuries due to high pressure injection require immediate surgical treatment and / or steroid therapy in order to minimize tissue damage and loss of function.

5. Fire-fighting measures

Evacuate all non-emergency personnel from the fire area.

Specific hazards:

Hazardous combustion substance may include:

Airborne solid and liquid particulates and a complex mixture of gases (smoke)

Carbon monoxide. Unidentified organic and inorganic compounds.

Appropriate Extinguishing Media:

Chemical foam, sprinkled or atomized water.

Dry chemical powder, carbon dioxide, sand or earth may be used for small fires.

N.A. Extinguishing Media: Never spray water.

Protection of Fire Fighters:

Proper protective equipment:Including necessary breathing apparatus for approaching the fire point in a confined space.

6. Leakage emergency treatment

Avoid contact with spilled or released material. Please refer to Section 8 of the SDS for instructions of personal protective equipment selection. Please refer to Section 13 for the disposal information. Please abide by all applicable local and international regulations.

Personal Precautions: Avoid contact with skin and eyes.

Environmental Precautions:

Use appropriate containment to avoid environmental pollution.

Prevent it from spreading or entering drains, ditches or rivers with sand, earth or other appropriate barriers.

Methods for Clearing:

The ground will be very smooth with spills. Immediately clean up spill to avoid accidents.

Set obstacles with sand, earth or other blocking materials to prevent spreading.

Reclaim liquid directly or store it in an absorbent.

Absorb the residue with clay, sand or other suitable absorbent, and then properly dispose it.

Additional Recommendations:

Report significant spills that cannot be handled to the local authorities.

7. HANDLING AND STORAGE

General Precautions:

If there is a risk of inhalation of vapors, mists or fumes, use local exhaust and ventilation system.

Properly dispose any contaminated rags or cleaning materials to prevent fire.

It will contribute to the development of an effective control system for the safe handling, storage and disposal of this product to include information of this SDS into the local circumstances risk assessment.

Precautions for Safe Handling:

Avoid prolonged or repeated contact with skin.

Avoid inhaling its vapor and (or) fumes.

Wear safety footwear and use proper handling tools when handling the product in drums.

Conditions for Safe Storage:

Store in airtight containers in a cool and well-ventilated place.

Use properly labeled and closeable containers.

Storage temperature: -15 ~ 50 ℃ for long-term storage (more than 3 months); -20 ~ 60 ℃ for short-term storage.

Unsuitable Material: PVC

Other Recommendations:

Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

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If the ACGIH data is provided herein, it is for information only.

Occupational Exposure Limits					
Chemical Product	**Source**	**Type**	**ppm**	**mg/m³**	**CAS NO.**
baise oil Mist	ACGIH	TWA (inhalable fragments)		5 mg/m³	**8002-05-09**

Biolo gical Expo sure Index (BEI)

- See reference documents for details.

No data available for reference.

Appropriate Engineering Controls:

The required level of protection and types of control measures vary depending on potential exposure conditions.

Select control measures on the basis of a risk assessment of local circumstances.

Appropriate measures include: Adequate ventilation to control airborne concentrations.

Airborne concentrations may occur if heated, sprayed or atomized.

Personal Protective Measures:Personal protective equipment (PPE) should conform to the national standards of construction. Check with PPE suppliers.

Respiratory protection:

Respiratory protective equipment is generally not needed under normal conditions of use.

Good Industrial Hygiene Practice indicates that precautions should be taken to avoid inhalation of this product.

If airborne concentrations fail to be controlled to a level adequate to protect workers' health by engineering control measures , please select the respiratory protective equipment suitable for the conditions of use and conforming to the relevant laws and regulations.

Please check with respiratory protective equipment suppliers.

Please select the appropriate combination of mask and filter if necessary.

Select a filter suitable for the mixture of particulate / organic gases and vapors (boiling point > 65 ℃, i.e. 149 ℉).

Hand protection:

In order to obtain suitable chemical protection where hands may contact the product, gloves conforming to therelevant standards (Europe: EN374; US: F739) and made of PVC, neoprene or NBR should be used.

Suitability and durability of gloves depend on how to use them, such as frequency and time period of exposure, chemical resistance, thickness and dexterity.

Always seek advice from glove suppliers. Contaminated gloves should be replaced.

Personal hygiene is the main method of effective hand care.

Gloves can be put on only after hands are washed.

After using gloves, hands should be thoroughly washed and dried. It is recommended to use non-aromatic moisturizing cream.

Eye protection: If splashes are likely to occur, wear safety goggles or full face masks.

Body protection: In general, special skin protection measures are not needed in addition to the ordinary work clothing.

Thermal Hazards: Not applicable.

Monitoring Methods:

Monitor the concentration of substances in worker's breathing area or the general workplace, in order to confirm compliance with OEL and adequacy of exposure controls.

Biological monitoring may also be used for some substances.

Environmental Exposure Controls:

Reduce environmental emissions.

Environmental assessment must be carried out to ensure compliance with local environmental regulations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Amber; liquid at room temperature.

Odor: Slight hydrocarbon.

Odor Threshold: No data available for reference.

PH: Not applicable.

Initial Boiling Point and Boiling Range: > 280 ℃.

Pour Point: Typically -24℃.

Flash Point: 254℃.

Upper Flammable or Explosive Limit: Typically 1% - 10% (V) (based on mineral oil).

Autoignition Temperature: > 305℃.

Vapor Pressure: < 0.5Pa at 20 ℃/ 68 ℉(estimated value).

Relative Density: Typically 0.873 g/cm^3 at 15 ℃/ 59 ℉.

Viscosity: 106

Water Solubility: Negligible.

Solubility: No data available (in other solvents).

Partition Coefficient: > 6 (based on data of similar products).

Dynamic Viscosity: No data available for reference.

Kinematic Viscosity: Typically 14.8 mm^2/s at 100℃/212℉.

Vapor Density: > 1 (estimated value) (Air = 1).

Evaporation Rate: No data available for reference (nBuAc=1).

Decomposition Temperature: No data available for reference.

Flammability: No data available for reference.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Possible Hazardous Reactions: No data available for reference.

Conditions to Avoid: Extreme temperatures and direct sunlight.

Materials to Avoid: Strong oxidants.

Hazardous Decomposition Products: No hazardous decomposition products will be produced under normal storage conditions.

11. TOXICOLOGICAL INFORMATION

Data of Toxicological Pathology Test Results

Basis for Assessment: The information provided is based on components and the toxicology data of similar products.

Likely Routes of Exposure: Skin and eye contact are the main routes of exposure although exposure may occur through ingestion or the following accidents.

Acute Toxicity:

Acute oral toxicity: Low expected toxicity: LD50> 5000 mg / kg, rat

Acute dermal toxicity: Low expected toxicity: LD50> 5000 mg / kg, rabbit.

Acute inhalation toxicity: Inhalation hazard is considered inexistent under normal conditions of use.

Skin Corrosion/Irritation:

Expected to be slightly irritating.

Prolonged or repeated skin contact without proper cleaning may cause clogging of the pores of the skin, resulting in greasy acne / folliculitis or other diseases.

Serious Eye Damage / Irritation: Expected to be slightly irritating.

Respiratory Irritation: Inhalation of vapors or mists may cause irritation.

Respiratory or Skin Sensitization: Not expected to be a skin allergen.

Inhalation Hazard: Not considered as inhalation hazardous.

Germ Cell Mutagenicity: Not considered a mutagenic hazard.

Carcinogenicity: The product contains various types of synthetic base oil. Animal skin-applying tests show that these synthetic base oil are not carcinogenic.

Synthetic base oils are not classified as carcinogenic by the IARC. It is unknown whether other components are carcinogenic.

Reproductive / Developmental Toxicity: No expected hazards.

Specific Target Organ Systematic Toxicity: No expected hazards.

Additional Information:

Used oils may contain harmful impurities accumulated during use.

The concentration of such impurities depends on use, and there may be risks to health and the environment in disposal.

ALL used oil should be handled with caution and skin contact should be avoided as much as possible.

Animal tests show that sustained contact with used engine oil may cause skin cancer.

12. ECOLOGICAL INFORMATION

Basis for Assessment:

There is no specific ecotoxicological data to determine this product.

The above information is provided on the basis of components and ecotoxicology of similar products.

Acute Toxicity:

Poorly soluble mixture. May cause aquatic organisms to give out foul smell; expected to be practically non-toxic: LL/EL/IL50 >100 mg/l (for aquatic organisms)(LL/EL50 is expressed as the nominal amount of product; moisture test is required)

When the concentration is below 1mg/L, the mineral oil is not expected to cause any chronic effects to aquatic organisms.

Microorganisms: No data available for reference.

Liquidity: Liquid under most ambient conditions; float on water.

Persistence / Degradability:

Expected to be not readily biodegradable. Major components are expected to be inherently biodegradable, but this product contains components that may persist in the environment.

Bioaccumulative Potential: Contains components with bioaccumulative potential.

Other Adverse Reactions:

The product is a mixture of non-volatile components and is not expected to be discharged into the air a lot.

Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

13. DISPOSAL CONSIDERATIONS

Chemical Disposal:

It should be recycled or reused as much as possible.

It is the responsibility of waste producers to identify the toxicity and physical properties of the substances produced in order to develop appropriate waste classification and disposal methods in line with the relevant regulations.

Do not dispose into the environment, drains or water courses.

Container Disposal:

In accordance with the current regulations in force, it should be preferably disposed by a recognized waste collector or contractor.

Local Legislation: Disposal method should conform to applicable regional, national and local laws and regulations.

14. PART OF TRANSPORT INFORMATION

Areas (as per ADR classification): Not regulated

Not classified as hazardous under ADR regulations.

IMDG : Not classified as hazardous under IMDG regulations.

IATA (Specific provisions in different countries are slightly different.) : Not classified as hazardous under IATA regulations.

15. REGULATORY INFORMATION

Chemical Inventory: All chemical substances have been included in the Inventory of Existing Chemical Substances in China.

16. OTHER INFORMATION

SDS Version:3.0

SDS Effective Date: Jun. 28,2025

SDS Commencement: All handlers of this product should be familiar with the information contained herein.

Declaimer:

The information provided herein is based on our understanding of existing data, and description of this product is only for the compliance with health, safety and environmental requirements.

We provide no guarantee in respect of the specific characteristics of this product.