

SAFETY DATA SHEET

SECTION 1: Identification of the hazardous chemical and of the supplier

1.1. Product identifier

Name: HYDRAULIC MINERAL OIL
SM-DB-OIL

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use Machine oil.

Restrictions on use The Environmental Protection Agency prohibits processing and distribution of this chemical/product for any use other than:

- (1)In hydraulic fluids either for the aviation industry or to meet military specifications for safety and performance where no alternative chemical is available that meets U.S. Department of Defense specification requirements,
- (2)In lubricants and greases for aerospace and turbine uses and, for all other lubricant and grease uses before November 21, 2039,
- (3)circuit boards and wire harnesses, including but not limited to terminal and fuse covers, cable sleeves, casings, connectors and tapes,
- (4)As an intermediate in the manufacture of cyanoacrylate glue,
- (5)In specialized engine air filters for locomotive and marine applications,
- (6)In adhesives and sealants before January 6, 2025, after which use in adhesives and sealants is prohibited,
- (7)In new parts for motor vehicles before November 21, 2039 and replacement parts for motor vehicles before November 19, 2054,
- (8)In new parts for aerospace vehicles before November 19, 2054 and replacement parts for aerospace vehicles after the end of the aerospace vehicles service lives,
- (9)In marine antifouling coating products that are registered under the Federal Insecticide, Fungicide, and Rodenticide Act and that meet U.S. Department of Defense specification requirements before November 19, 2029,
- (10)In new manufacturing equipment, new products or articles in the semiconductor industry, for new heating, ventilation, air-conditioning, refrigeration, and water-heating equipment, new power generating equipment, new laboratory equipment, new commercial electronic equipment, and new consumer electronic equipment before November 20, 2034,
- (11)replacement parts for manufacturing and laboratory equipment after the end of the equipment's service life,
- (12)replacement parts for heating, ventilation, air-conditioning, refrigeration, and water-heating equipment, for power generating equipment, and for commercial electronic equipment before November 19, 2049,
- (13)replacement parts for consumer electronic equipment before November 19, 2031,

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(14)in other articles before October 31, 2024, after which use in articles other than those with later phase-in prohibition dates or exclusions is prohibited.

In addition, all persons are prohibited from releasing PIP (3:1) to water during manufacturing, processing, and distribution in commerce, and must follow all existing regulations and best practices to prevent the release of PIP (3:1) to water during the commercial use of PIP (3:1).

1.4. Manufacturer/Importer/Supplier/Distributor information

SHIMANO NORTH AMERICA BICYCLE, INC.

One Holland, Irvine, California 92618, U.S.A

Telephone: +1-949-951-5003

1.5. Emergency phone number

Emergency number: +1-949-951-5003

SECTION 2: Hazards identification

2.1. GHS classification

Physical hazards: (none)

Health hazards:

Aspiration hazard Category 1

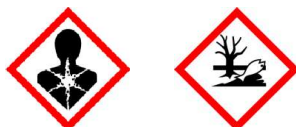
Environmental hazards:

Long-term (chronic) aquatic hazard Category 2

OSHA defined hazards: Not classified

2.2. GHS label elements

Hazard pictograms



Signal word Danger

Hazard statements May be fatal if swallowed and enters airways.

Toxic to aquatic life with long lasting effects.

Precautionary statements «Prevention»

Avoid release to the environment.

«Response»

IF SWALLOWED: Immediately call a POISON CENTER/doctor.

Do NOT induce vomiting.

Collect spillage.

«Storage»

Store locked up.

«Disposal»

Dispose of contents/ container to an approved waste disposal plant.

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2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

Substance/Mixture

Chemical name (Generic name)	CAS no.	Content (%)
Petroleum Oil, Paraffinic	64742-55-8	90-99
Phenol, isopropylated, phosphate (PIP) (3:1) [Triphenyl phosphate > 5%]	68937-41-7	0.5-0.9
Butylated hydroxytoluene	128-37-0	0.1-0.24

SECTION 4: First-aid measures**4.1 Description of first aid measures**

- Inhalation:
- Remove patient to fresh air and keep at rest in a comfortable breathing position.
 - If you feel unwell, call the Poison Center or the doctor.
- Skin contact:
- Remove/take off immediately All stained clothing must be laundered before reuse.
 - If skin irritation occurs, seek medical attention immediately.
- Eyes contact:
- IF IN EYES: Rinse carefully with water for a few minutes. If you are wearing contact lenses and can easily remove them, remove the contact lenses.
 - If eye irritation persists, seek medical advice/take to hospital immediately.
- Ingestion:
- IF SWALLOWED: Immediately call a POISON CENTER/doctor
 - Do NOT induce vomiting.

4.2 Most important symptoms/effects, acute And delayed

- If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever.
- The onset of respiratory symptoms may be delayed for several hours after exposure.
- Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance.
- Ingestion may result in nausea, vomiting and/or diarrhea.

SECTION 5: Fire-fighting measures

- 5.1 Extinguishing media:
- Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
- 5.2 Unsuitable extinguishing media:
- Do not use water in a jet.
- 5.3 Special hazards arising from the substance or mixture:
- Hazardous combustion products may include:
 - A complex mixture of airborne solid and liquid particulates and gases (smoke).
 - Carbon monoxide may be evolved if incomplete combustion occurs.
 - Unidentified organic and inorganic compounds.

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- 5.4 Special protective equipment and precautions for fire-fighters: Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected.
- Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Avoid contact with skin and eyes.
- 6.2 Environmental precautions Local authorities should be advised if significant spillages cannot be contained.
- 6.3 Methods and equipment for containment and cleaning up
- Slippery when spilt. Avoid accidents, clean up immediately.
 - Prevent from spreading by making a barrier with sand, earth or other containment material.
 - Reclaim liquid directly or in an absorbent.
 - Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.
- 6.4 Additional advice
- For guidance on selection of personal protective equipment see Section 8 of this Safety Data Sheet.
 - For guidance on disposal of spilled material see Section 13 of this Safety Data Sheet.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
- If there is a risk of inhaling vapors, oil mists, or sprays, use local exhaust ventilation.
 - Avoid prolonged or repeated skin contact.
 - Avoid inhaling vapors and/or mists.
 - When loading or unloading drums, wear safety shoes and use appropriate loading and unloading tools.
 - Dispose of contaminated clothing or cleaning materials properly to prevent fire.
 - Wear eye protection if there is a risk of splashing in the eyes when handling materials.
 - Avoid contact with strong oxidizing agents.
 - Use proper grounding and bonding procedures to prevent static buildup during mass transfer operations.
- 7.2 Conditions for safe storage, including any incompatibilities
- Storage
- Keep closed containers properly sealed and stored in a cool, well-ventilated place.
 - Use properly labeled, sealable containers.
 - Store in oil-proof dikes.
 - Store at room temperature.

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Packaging material	•Suitable material: For containers or container linings, use mild steel or high density polyethylene. •Unsuitable material: PVC.
Container Advice	Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

SECTION 8: Exposure controls/personal protection

Chemical Name	CAS no.	Control parameters / Permissible concentration	
		ACGIH	OSHA Z-1
Oil mist, mineral	Not Assigned	TWA 5 mg/m ³ (Inhalable particulate matte)	TWA 5 mg/m ³ (Mist)

Appropriate engineering controls	•Washing hands, eyes and showers should be installed near the operation place. •If necessary, install a local exhaust system or a full ventilation system. •Obtain operating instructions before use. •Do not operate until you have read and understood all safety precautions. •Use appropriate personal protective equipment.
Personal Protective Equipment:	
Respiratory protection:	•Respiratory protection is not required under normal conditions of use. •Preventive measures are taken in accordance with good occupational health practice to prevent inhalation of the substance. •If technical control does not maintain the concentration in the working environment at a level sufficient to protect the health of workers, choose respiratory protection equipment that is suitable for the specific conditions of use and complies with the relevant legal requirements.
Hand protection:	•Where there is a possibility that hands may come into contact with the product, appropriate chemical protection may be provided by the use of gloves conforming to the relevant standards and made of the following materials: PVC, Neoprene or Nitrile rubber gloves. •Contaminated gloves should be replaced. •Wash and dry hands thoroughly after using gloves.
Eye protection:	Eye protection is recommended if there is a risk of splashing in the eyes when handling the material.
Skin and body protection:	•Skin protection other than standard work clothes is usually not required. •It is good practice to wear chemical resistant gloves.
Health Measures:	•Do not eat or drink while using this product. •Wash hands thoroughly after disposal.

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SECTION 9: Physical and chemical properties

Physical state:	liquid
Color:	amber
Odour:	Slight hydrocarbon
Odour Threshold	Data not available
pH:	No data available.
pour point	-27.50°C/-17.50°F Method: JIS K 2269
Melting / freezing point	No data available.
Boiling point or initial boiling point and boiling range:	> 280°C/536 °F estimated value(s)
Flash point:	153°C/307°F Method: ASTM D92 (COC)
Evaporation rate:	No data available.
Flammability	
Flammability (solid/gas)	No data available.
Flammability (liquids)	No data available.
Lower and upper explosion limit/Flammability limit	Upper explosion limit : Typical 10 % (V) Lower explosion limit : Typical 1 % (V)
Vapor pressure	< 0.5 Pa (20°C/68°F) estimated value(s)
Relative vapour density	> 1 estimated value(s)
Density and / or relative density	
Density	824 kg/m ³ (15.0°C/59.0°F) Method: ASTM D1298
Solubility(ies)	
Water solubility	negligible
Solubility in other solvents	Data not available
Partition coefficient n-octanol/water	log Pow: > 6 (based on information on similar products)
Auto ignition temperature:	> 320°C/608°F
Decomposition temperature:	No data available.
Viscosity:	
Viscosity (Dynamic)	Data not available
Viscosity, kinematic	8 mm ² /s (40°C/104°F) Method: JIS K 2283 2.3 mm ² /s (100°C/212°F) Method: JIS K 2283
Particle characteristics:	No data available.
Particle size:	No data available.
Explosive properties:	Classification Code: Not classified
Oxidizing properties:	No data available.
Conductivity:	This material is not expected to be a static accumulator.

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SECTION 10: Stability and reactivity

Reactivity:	The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.
Chemical stability:	Stable.
Possibility of hazardous reaction:	Reacts with strong oxidizing agents.
Conditions to avoid:	Extremes of temperature and direct sunlight.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition products:	No decomposition if stored and applied as directed.

SECTION 11. Toxicological information

Acute toxicity:	Oral: LD50 rat: > 5,000 mg/kg Remarks: Low toxicity Based on available data, the classification criteria are not met. Remarks: Aspiration into the lungs may cause chemical pneumonitis which can be fatal. Dermal: LD50 Rabbit: > 5,000 mg/kg Remarks: Low toxicity Based on available data, the classification criteria are not met. Inhalation: Remarks: Based on available data, the classification criteria are not met.
Skin corrosion/irritation:	No data available.
Serious eye damage/irritation:	No data available.
Respiratory or skin sensitization:	No data available.
Germ cell mutagenicity:	No data available.
Carcinogenicity:	No data available.
Reproductive toxicity:	No data available.
STOT-single exposure:	No data available.
STOT-repeated exposure:	No data available.
Aspiration hazard:	Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

SECTION 12: Ecological information

Ecotoxicity	Toxicity to fish (Acute toxicity) : Remarks: LL/EL/IL50 1-10 mg/l Toxic Toxicity to crustacean (Acute toxicity) : Remarks: LL/EL/IL50 1-10 mg/l Toxic Toxicity to algae/aquatic plants (Acute toxicity):Remarks: LL/EL/IL50 1-10 mg/l Toxic Toxicity to fish (Chronic toxicity) :Remarks: Data not available Toxicity to crustacean(Chronic toxicity):Remarks: Data not available Toxicity to microorganisms(Acute toxicity):Remarks: Data not available
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Persistence and degradability	Remarks: Not readily biodegradable., Major constituents are inherently biodegradable, but contains components that may persist in the environment.
Bioaccumulative potential	Remarks: Contains components with the potential to bioaccumulate. Partition coefficient: n- octanol/water: log Pow: > 6 Remarks: (based on information on similar products)
Mobility in soil	Remarks: Liquid under most environmental conditions., If it enters soil, it will adsorb to soil particles and will not be mobile. Remarks: Floats on water.
Hazardous to the ozone layer	No data available.
Other adverse effects	Does not have ozone depletion potential, photochemical ozone creation potential or global warming potential., Product is a mixture of non-volatile components, which will not be released to air in any significant quantities under normal conditions of use. Poorly soluble mixture., Causes physical fouling of aquatic organisms. Mineral oil does not cause chronic toxicity to aquatic organisms at concentrations less than 1 mg/l.

SECTION 13: Disposal considerations

Product	The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.
Contaminated packing	Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

SECTION 14: Transport information

International Regulations

	ADR/RID	IMO/IMDG	ICAO/IATA
UN No.	3082	3082	3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Phenol, isopropylated phosphate (3:1) (Triphenyl phosphate > 5%))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Phenol, isopropylated phosphate (3:1) (Triphenyl phosphate > 5%))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Phenol, isopropylated phosphate (3:1) (Triphenyl phosphate > 5%))

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Class	9	9	9
Packing Group	III	III	III
Labels	9	9	9
Hazard Identification Number	90	–	–
Environmental hazards	Yes	Marine Pollutant : Yes	–

Maritime transport in bulk according to IMO instruments

MARPOL Annex 1 rules apply for bulk shipments by sea.

Special precautions for user

Remarks : Special Precautions: Refer to Section 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations for the product**

US federal regulations :	
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.	
Toxic Substances Control Act (TSCA) Inventory	ALL components listed.
TSCA Section 12(b) Export Notification(40CFR707,Subpt.D)	Not regulated.
CERCLA Hazardous Substance List(40CFR302.4)	Not Listed.
SARA 304 Emergency release notification	Not regulated.
OSHA Specifically Regulated Substances (29CFR1910.1001–1050)	Not Listed.
Superfund Amendments and Reauthorization Act of 1986(SARA)	
SARA 302 Extremely hazardous substance	Not Listed.
SARA 311/312 Hazardous	Petroleum Oil, Paraffinic (CAS 64742–55–8) Phenol, isopropylated, phosphate (3:1) (CAS 68937–41–7)
SARA 313 (TRI reporting)	Not regulated.
Other federal regulations	
List of Hazardous Air Pollutants–EPA(CAA)	Not Listed.
U.S. CEPN Priority Chemicals List	Not Listed.
US state regulations	
Massachusetts RTK – Substance List	Petroleum Oil, Paraffinic (CAS 64742–55–8) Phenol, isopropylated, phosphate (3:1) (CAS 68937–41–7)
New Jersey Worker and Community Right-to-Know Act	Phenol, isopropylated, phosphate (3:1) (CAS 68937–41–7)
Pennsylvania Worker and Community Right-to-Know Law	Petroleum Oil, Paraffinic (CAS 64742–55–8) Phenol, isopropylated, phosphate (3:1) (CAS 68937–41–7)
The Proposition 65 List in California	Not Listed.

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15.2 Phenol, isopropylated, phosphate (PIP) (3:1) (CAS 68937-41-7)

The Environmental Protection Agency prohibits processing and distribution of this chemical/product for any use other than:

- (1) In hydraulic fluids either for the aviation industry or to meet military specifications for safety and performance where no alternative chemical is available that meets U.S. Department of Defense specification requirements,
- (2) In lubricants and greases for aerospace and turbine uses and lubricants and, for all other lubricant and grease uses before November 21, 2039,
- (3) circuit boards and wire harnesses, including but not limited to terminal and fuse covers, cable sleeves, casings, connectors and tapes,
- (4) As an intermediate in the manufacture of cyanoacrylate glue,
- (5) In specialized engine air filters for locomotive and marine applications,
- (6) In adhesives and sealants before January 6, 2025, after which use in adhesives and sealants is prohibited,
- (7) In new parts for motor vehicles before November 21, 2039 and replacement parts for motor vehicles before November 19, 2054,
- (8) In new parts for aerospace vehicles before November 19, 2054 and replacement parts for aerospace vehicles after the end of the aerospace vehicles service lives,
- (9) In marine antifouling coating products that are registered under the Federal Insecticide, Fungicide, and Rodenticide Act and that meet U.S. Department of Defense specification requirements before November 19, 2029,
- (10) In new manufacturing equipment, new products or articles in the semiconductor industry, for new heating, ventilation, air-conditioning, refrigeration, and water-heating equipment, new power generating equipment, new laboratory equipment, new commercial electronic equipment, and new consumer electronic equipment before November 20, 2034,
- (11) replacement parts for manufacturing and laboratory equipment after the end of the equipment's service life,
- (12) replacement parts for heating, ventilation, air-conditioning, refrigeration, and water-heating equipment, for power generating equipment, and for commercial electronic equipment before November 19, 2049,
- (13) replacement parts for consumer electronic equipment before November 19, 2031,
- (14) in other articles before October 31, 2024, after which use in articles other than those with later phase-in prohibition dates or exclusions is prohibited.

In addition, all persons are prohibited from releasing PIP (3:1) to water during manufacturing, processing, and distribution in commerce, and must follow all existing regulations and best practices to prevent the release of PIP (3:1) to water during the commercial use of PIP (3:1).

SECTION 16: Other information

Issue date : 1/8/2025

Revision date : - Version: 1.0

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS created by SHIMANO INC.