

SAFETY DATA SHEET

1 Chemical Product and Company Identification

Product Name	PREMIUM GREASE
Manufacture & Distributor	SHIMANO NORTH AMERICA BICYCLE, INC.
Address	One Holland, Irvine, California 92618, U.S.A
Emergency Phone number	+1-949-951-5003 (Business Hours Only)
Manufacture & Distributor	SHIMANO EUROPE B.V.
Address	High Tech Campus 92, 5656 AG Eindhoven, The Netherlands
Emergency Phone number	+31-402-612222 (Business Hours Only)
E-mail	shimano.eu.sds@shimano-eu.com
Manufacture & Distributor	SHIMANO INC.
Address	3-77 Oimatsu-cho, Sakai-ku, Sakai City, Osaka 590-8577, Japan
Emergency Phone number	0570-031961 (Business Hours Only)
Use and Restrictions	Lubricant

2 Hazards Identification**GHS Classification**

Not classified

3 Composition/Information on Ingredients

Classification of Substance Mixture
or Mixture

Chemical Name or Common Name Lubricant

Composition

Chemical Name	Content (%)	Chemical Substances Control Law No.	CAS No.
Zinc Dialkyl (C8-24) Dithiophosphate	1 to 5	2-2185	4259-15-8

According to IP346, highly refined mineral oils contain less than 3% DMSO extractable material.

4 First-aid Measures

GENERAL ADVICE: Take off contaminated clothing and wash before reuse. In the event of cardiac arrest, administer CPR immediately.

IF INHALED: If breathing is difficult, move to fresh air and rest in a position that facilitates breathing. If breathing becomes irregular or stops, perform artificial respiration or administer oxygen as needed. Undergo a medical examination if in doubt or if symptoms appear.

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IF ON SKIN:	Wash immediately with soap and plenty of water after contact. Seek medical advice if a skin reaction occurs.
IF IN EYES:	Rinse eyes thoroughly with plenty of water for 10 to 15 minutes, keeping eyelids open. If wearing contact lenses and they are easy to remove, remove them and continue rinsing. Seek advice from an ophthalmologist afterward.
IF SWALLOWED:	Rinse mouth. Do not induce vomiting, as aspiration may occur. Never give anything orally to an unconscious person. If feeling unwell, call a doctor.

5 Fire-fighting Measures

Suitable Extinguishing Media:	Powder, alcohol-resistant foam, sand, carbon dioxide
Inappropriate Extinguishing Media:	Water
Specific Hazards during Firefighting:	Toxic vapors may be released in case of fire (NO _x , CO, and CO ₂).
Protective Equipment for Firefighters:	Wear a self-contained breathing apparatus and chemical protective clothing.
Additional Information:	Use fine water spray to cool containers exposed to danger. Move undamaged containers from the dangerous area if possible. Contaminated fire water must be collected separately. Prevent fire extinguishing water from entering drains, ground, and waterways. Dispose of fire residues and contaminated fire extinguishing water in accordance with local regulations.

6 Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures:	Avoid breathing mist/vapors/spray. Avoid contact with the substance. Prevent substance from releasing as much as possible. Eliminate all sources of ignition. Ensure adequate ventilation. Keep unprotected people away and wear appropriate protective equipment. Take off contaminated clothing and wash before reuse.
Environmental Precautions:	Prevent entry to groundwater, surface water, and drains. Notify relevant authorities if necessary.
Methods and Materials for Containment and Cleaning Up:	Remove spillage immediately. Wipe up with absorbent materials (such as cloth or fleece). Absorb with liquid-binding materials (such as sand, diatomaceous earth, universal binders, or sawdust). Prevent spreading over a wide area (contain or use oil barriers if necessary). Contain spills in sump pallets (leak-proof pallets) or curb areas. Block drains. Do not return spilled material to the original container for reuse.
Secondary Disaster Prevention Measures:	Take precautions as spilled material may cause slippery surfaces.

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7 Handling and Storage**Handling**

Technical Measures:	Ensure adequate ventilation and, if necessary, local exhaust. Do not breathe mist, vapors, or spray. Prevent contact with the eyes, skin, and clothing. Wear appropriate protective equipment. Do not eat, drink, or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash before reuse. Avoid contact with the skin, eyes, and clothing.
Precautions for Safe Handling:	Keep away from heat sources. Keep away from ignition sources—no smoking. When handling in large quantities, take precautions against static electricity.
Avoidance of Contact:	Keep away from oxidizers, acids, food, beverages, and animal feed.
Hygiene Measures:	Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Storage

Conditions for Safe Storage:	Keep containers tightly closed in a cool, well-ventilated place. Ensure that any spills are contained within pallets or curb areas. Prevent the product from entering shafts and drainage systems. Avoid exposure to heat, direct sunlight, and cold.
Safe Packaging Materials:	Store containers in a dry condition. Store only in the original container. Keep containers upright and protect from frost. Recommended Storage Temperature: 0 to 40°C Storage Stability: > 6 months at 0 to 40°C

8 Exposure Controls and Personal Protection

Occupational Exposure Limit (OEL): CAS No. 4259-15-8 Zinc Dialkyl (C8-24) Dithiophosphate

German DFG Short-Term Exposure Limit: 0.4 mg/m³ (compound, inorganic; respirable fraction)

German DFG Short-Term Exposure Limit: 4 mg/m³ (compound, inorganic; inhalable fraction)

German DFG Long-Term Exposure Limit: 0.1 mg/m³ (compound, inorganic; respirable fraction)

German DFG Long-Term Exposure Limit: 2 mg/m³ (compound, inorganic; inhalable fraction)

DNEL/DMEL: Information on Zinc Dialkyl (C8-24) Dithiophosphate

DNEL workers:

Inhalation, systemic, long-term: 6.6 mg/m³

Dermal, systemic, long-term: 9.6 mg/kg bw/d

DNEL consumers:

Inhalation, systemic, long-term: 1.67 mg/m³

Dermal, systemic, long-term: 4.8 mg/kg bw/d

Oral, systemic, long-term: 0.19 mg/kg bw/d

PNEC: Information on zinc dialkyl (C8-24) dithiophosphate:

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PNEC: Information on Zinc Bis[O,O-bis(2-ethylhexyl)]bis(dithiophosphate):

PNEC water (freshwater): 4 µg/L

PNEC water (saltwater): 4.6 µg/L

PNEC sewage treatment plant: 3.8 mg/L

PNEC sediment (freshwater): 0.322 mg/kg

PNEC sediment (saltwater): 0.032 mg/kg

PNEC soil: 0.062 mg/kg

Engineering Measures

Install equipment to enclose sources of vapor emission or provide local exhaust ventilation, or work within a fully self-contained system.

Protective Equipment

Respiratory Protection:	Use an organic gas mask, supplied air respirator, or self-contained breathing apparatus, depending on OEL levels.
Hand Protection:	Wear solvent-resistant chemical protective gloves, such as those made of Viton rubber.
Eye and Face Protection:	Wear safety goggles (protective eyewear).
Skin and Body Protection:	Wear solvent-resistant protective boots and clothing.

Special Precautions

Do not breathe mist/vapors/spray. Prevent contact with the eyes, skin, and clothing. Take off contaminated clothing and wash before reuse. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

9 Physical and Chemical Properties

Physical State:	Paste
Color:	Green
Odor:	Characteristic pungent odor
Melting Point °C:	>150
Boiling Point/Initial Boiling Point °C:	>250
Flammability:	No data available
Explosion Limits	
Lower Limit %:	No data available
Upper Limit %:	No data available
Flash Point°C:	>200
Auto-Ignition Temperature °C:	No data available
Decomposition Temperature:	>240
pH:	No data available
Kinematic Viscosity:	No data available

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Vapor Pressure bar:	No data available
Density/Relative Density g/mL:	0.9
Relative Gas Density:	No data available
Particle Characteristics:	No data available
Explosiveness:	None-explosive

10 Stability and Reactivity

Reactivity:	No hazardous reactions when handled and stored as recommended.
Chemical Stability:	Stable under recommended storage conditions.
Possibility of Hazardous Reactions:	No hazardous reactions when handled and stored as recommended.
Conditions to Avoid:	Keep away from heat sources, sparks, open flames, and direct sunlight. Protect from frost.
Incompatible Materials:	Strong oxidizers, strong acids, and strong bases.
Hazardous Decomposition Products:	None under normal use.
Thermal Decomposition:	>240°C

11 Toxicological Information

Acute Toxicity:	Not classified based on available data.
Acute Toxicity (Oral):	Not classified based on available data.
Acute Toxicity (Dermal):	Not classified based on available data.
Acute Toxicity (Inhalation):	Not classified based on available data.
Skin Corrosion/Irritation:	Not classified based on available data.
Serious Eye Damage/Eye Irritation:	Not classified based on available data.
Respiratory or Skin Sensitization:	Not classified based on available data.
CMR Effects (Carcinogenicity, Mutagenicity, and Reproductive Toxicity)	
Germ Cell Mutagenicity:	Not classified based on available data.
Carcinogenicity:	Not classified based on available data.
Reproductive Toxicity:	Not classified based on available data.
Specific Target Organ Toxicity (Single Exposure):	Not classified based on available data.
Specific Target Organ Toxicity (Repeated Exposure):	Not classified based on available data.

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Aspiration Hazard: Not classified based on available data.

12 Ecological Information

Ecotoxicity:

Aquatic Toxicity: Not classified based on available data.

Fish Toxicity: LC50 Danio rerio (zebrafish): > 100 mg/L/96h (OECD 203)

Daphnia Toxicity: EC50 Daphnia magna: 100 mg/L/48h (OECD 202)

Algae Toxicity: EC50: > 100 mg/L/72h (OECD 201)

Information on Zinc Bis[0,0-bis(2-ethylhexyl)]bis(dithiophosphoric acid)

Fish Toxicity: LL50 Oncorhynchus mykiss: 4.4 mg/L/96h (OECD 203)

Daphnia Toxicity: EL50 Daphnia magna: 75 mg/L/48h (OECD 202)

Algae Toxicity: EL50 Desmodesmus subspicatus (green algae): 410 mg/L/72h (OECD 201)

Water Hazard Class: 1 (Slightly hazardous to water; self-classification, mixture)

Persistence/Degradability: No data available for the mixture.

Bioaccumulative Potential: No data available for the mixture.

Mobility in Soil: No data available for the mixture.

PBT and vPvB Substances: Does not meet the criteria of PBT/vPvB as per REACH Annex XIII.

Other: Do not allow the product to enter groundwater, surface water, or drains.

13 Disposal Considerations

Waste Code (EPA): Product EC-Waste Code: 12 01 12

Information on Safe and Environmentally Preferable Disposal or Recycling of Chemicals, Contaminated Containers, and Packaging:

Disposal by Waste Contractor: State contents and dispose of them through a licensed industrial waste disposal company authorized by the prefectural governor.

Container Disposal: Clean and recycle empty containers or dispose of them at a licensed disposal facility.

14 Transport Information

UN No.: N/A

UN Proper Shipping Name: N/A

UN Classification: N/A

Packing Group: N/A

Transport Hazard Class (ADR/RID European, IMDG Maritime, ICAO-TI, IATA DGR Air): N/A

Domestic Regulation Information:

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This product is subject to domestic transport regulations; transport in compliance with the container and loading requirements specified by the relevant laws.

15 Regulatory Information

PRTR Act: N/A

Industrial Safety and Health Act

Hazardous Materials: N/A

Organic Solvent N/A

Regulations:

Specially Controlled N/A

Substances Regulations:

Designated Substances N/A

(Article 57):

Notification Substances N/A

(Article 57-2):

Published Chemical N/A

Substances:

Work Environment N/A

Evaluation Standards -

Control Concentrations:

Mandatory Use of N/A

Protective Equipment:

Poisonous and Deleterious N/A

Substances Control Act:

Fire Service Act: N/A

Ship Safety Act: N/A

16 Other Information

- This information pertains to safety only and does not guarantee product quality.
- Use only as directed on the product label; do not use for any other purposes.