

SAFETY DATA SHEET

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name : **FREEHUB GREASE**

Identification of Substance/Preparation

: GREASE

Application : Industrial Lubricating Grease

MSDS No. : FHG040830-Eng

Company Identification

Distributor : SHIMANO NORTH AMERICA BICYCLE, INC.

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

Emergency and Phone number : +1-949-951-5003 (Business Hours Only)

Distributor : SHIMANO EUROPE B.V.

Address : High Tech Campus 92 NL-5656 AG Eindhoven, The Netherlands

Emergency and Phone number : +31-402-612222 (Business Hours Only)

E-mail : shimano.eu.sds@shimano-eu.com

Distributor : SHIMANO INC.

Address : 3-77 Oimatsu-cho Sakaiku Sakai OSAKA 5908577, JAPAN

Phone number : 0570-031961 (Business Hours Only)

2. HAZARDS IDENTIFICATION

(EC) No 1272/2008 [CLP] : Not classified.

GHS Classification : Not classified.

POTENTIAL HEALTH EFFECTS : Under normal conditions of intended use this product does not pose a risk to health. Excessive exposure may result in eye skin or respiratory irritation.

For further health effects/toxicological data see Section 11.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	EC No	Mass %	CLP Classification
Mineral oil	Confidential	Confidential	40-5	Note L
Synthetic oil	Confidential	Confidential	45-55	N.A.
Lithium Soap	Confidential	Confidential	1-10	N.A.
Additive	N.A.	N.A.	1-10	N.A.

Note L

The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method' Institute of Petroleum London. This note applies only to certain complex oil-derived substances in Part 3.

The producer of "Mineral Oil" declares that it contains less than 3% DMSO extractable material by IP-346.

4. FIRST-AID MEASURES

Description of first aid measures

- Eyes : Wash eye thoroughly with copious quantities of water, ensuring eyelids are held open.
Obtain medical advice if any pain or redness develops or persists.
- Skin : Wash skin thoroughly with soap and water as soon as reasonably practicable.
Remove heavily contaminated clothing and wash underlying skin.
- Ingestion : If contamination of the mouth occurs, wash out thoroughly with water.
Except as a deliberate act, the ingestion of large amounts of product is unlikely.
If it should occur, do not induce vomiting; obtain medical advice.
- Inhalation : If inhalation of mists, fumes or vapour causes irritation to the nose or throat, or coughing, remove to fresh air. If symptoms persist obtain medical advice.

Notes to Physician : No useful information available.

Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment should in general be symptomatic and directed to relieving any effects.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Use foam, dry powder or water fog. Do not use water jets.

Special hazards arising from the substance or mixture

Toxic fumes may be evolved on burning or exposure to heat.

See Section 10 for information on stability and reactivity.

Advice for firefighters

Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Water may be used to cool nearby heat exposed areas/objects/packages.

Avoid spraying directly into storage containers because of the danger of boil-over.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- Ensure good ventilation. Evacuate all non essential personnel from the immediate area.
- Spilled material may make surfaces slippery.
- Use appropriate Personal Protective Equipment (PPE).

Environmental precautions

- Protect drains from potential spills to minimise contamination. Do not wash product into drainage system.

Methods and material for containment and cleaning up

- Contain and recover spilled material using sand or other suitable inert absorbent material.
- It is advised that stocks of suitable absorbent material should be held in quantities sufficient to deal with any spillage which may be reasonably anticipated.
- In the case of large spills contact the appropriate authorities.

Reference to other sections

- See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

- Avoid contact with eyes. If splashing is likely to occur wear a full face visor or chemical goggles as appropriate.
- Avoid frequent or prolonged skin contact with fresh or used product.
- Good working practices, high standards of personal hygiene and plant cleanliness must be maintained at all times.
- Whilst using do not eat, drink or smoke.
- Wash hands thoroughly after contact.
- Use disposable cloths and discard when soiled.

Conditions for safe storage, including any incompatibilities

- Store under cover away from heat and sources of ignition.
- Containers must be properly labelled and kept closed when not in use.
- Empty packages may contain some remaining product. Retain hazard warning labels on empty packages as a guide to the safe handling, storage and disposal of empty packaging.

Specific end use(s)

- Not available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

- This product contains mineral oil.
- Under conditions which may generate mists, observe the OSHA PEL of 5mg per cubic meter,ACGIH STEL of 10mg per cubic meter.

Exposure controls

- Wear face visor or goggles in circumstances where eye contact can accidentally occur.
- Change heavily contaminated clothing as soon as reasonably practicable; dry clean, launder and preferably starch before re-use.
- Wash any contaminated underlying skin with soap and water.
- Respiratory protection is unnecessary, provided the concentration of vapour, mists or fumes is adequately controlled.
- The use of respiratory equipment must be strictly in accordance with the manufacturers' instructions and any statutory requirements governing its selection and use.

9. PHYSICAL AND CHEMICAL PROPERTIES Typical Values

	Units	
Physical state		Semi solid
Color		Whitish yellow
Odor		Mild Oil Odor
Flash point(SETA)	°C	≥ 200
Dropping point	°C	178
Solubility in Water		insoluble

10. STABILITY AND REACTIVITY

Reactivity

Products of this type are stable and unlikely to react in a hazardous manner under normal conditions of use.

Chemical stability

Stable under normal storage conditions.

Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid

Heat. Incompatible materials.

Incompatible materials

Halogens, strong acids, alkalies and oxidizing agents.

Hazardous decomposition products

Thermal decomposition can produce a variety of compounds, the precise nature of which will depend on the decomposition conditions.

Incomplete combustion/ thermal decomposition will generate smoke, carbon dioxide and hazardous gases, which will include carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity	: Oral	The LD50 in rat is > 5000mg/kg.
	: Dermal	The LD50 in rat is > 5000mg/kg.

Skin corrosion/irritation : Not expected to be a primary skin irritant.
Based on data from components or similar materials.
Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis.
Symptoms may include redness, edema, drying, and cracking of the skin.

Serious eye damage/ irritation : Not expected to cause eye irritation. Based on data from components or similar materials.

Respiratory irritation : No data available to indicate product or components may be a respiratory irritant.

Respiratory or skin sensitization :
Skin No data available to indicate product or components may be a skin sensitizer.
Respiratory No data available to indicate product or components may be a respiratory sensitizer.

Germ cell mutagenicity	: No data available to indicate product or components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	: The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346. This note applies only to certain complex oil derived substances in Annex 1. The producer of "74869-22-0, 64742-52-5" declares that it contains less than 3% DMSO extractable material by IP 346.
Reproductive toxicity	: No data available to indicate either product or components at greater than 0.1% that may cause reproductive toxicity.
Specific target organ toxicity (repeated exposure):	No data available to indicate product or components present at greater than 0.1% that may cause STOT repeated exposure.
Other information	: No other health hazards known.

12. ECOLOGICAL INFORMATION

Toxicity	: Not expected to be harmful to aquatic organisms.
Persistence and degradability	: This product is not expected to be readily biodegradable.
Bioaccumulative potential	: There is no evidence to suggest bioaccumulation will occur.
Mobility in soil	: Spillages may penetrate the soil causing ground water contamination.
Results of PBT and vPvB assessment	: No additional information available.
Other adverse effects	: Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Where possible, arrange for product to be recycled.

Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations.

Incineration may be carried out under controlled conditions provided that local regulations for emissions are met.

Dispose of product and container carefully and responsibly. Do not dispose of near ponds, ditches, down drains or onto soil.

14. TRANSPORT INFORMATION

IMDG/IMO	:	Not Regulated
RID	:	Not Regulated
ADR	:	Not Regulated
ICAO	:	Not Regulated
IATA	:	Not Regulated

15. REGULATORY INFORMATION

CLP

This product does not meet the classification requirements of the current European legislation.

Signal Word : Not hazardous

GHS

Signal Word : Not Hazardous

16. OTHER INFORMATION

Complied by: * SHIMANO INC.

Disclaimer

The information above is believed to be accurate and represents the best information currently available to us.

We have reviewed any information contained herein which we received from sources outside SHIMANO INC..

However, no warranty or representation, express or implied is made as to the accuracy or completeness of the data and information contained in this data sheet.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.

No statement made in this data sheet shall be construed as a permission, recommendation or authorization given or implied to practice any patented invention without a valid license.

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