SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: PREMIUM GREASE

1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

Application of the substance / the mixture Only for proper handling.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Shimano Europe BV

High Tech Campus 92

5656 AG Eindhoven

Netherlands

T +31 (0)40 261 22 22

www.shimano.com

Further information obtainable from: Product safety service

1.4 Emergency telephone number:

In case of a medical emergency following exposure to a chemical, the public should call NHS Direct in England or Wales 0845 46 47 or NHS 24 in Scotland 08454 24 24 24 (UK only).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Eye Irrit. 2	H319 Causes serious eye irritation.
Aquatic Chronic 3	H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS07

Signal word	Warning
Hazard statements	H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use. P264 Wash thoroughly after handling. P273 Avoid release to the environment. P280 Wear eye protection / face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention. P501 Dispose of contents/container in accordance with local/regional/national/ international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:		
CAS: 4259-15-8 EINECS: 224-235-5 Reg.nr.: 01-2119493635-27	zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) Eye Dam. 1, H318; Aquatic Chronic 2, H411	2.5%

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture
No further relevant information available.

5.3 Advice for firefighters
Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Not required.

6.2 Environmental precautions:
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders,sawdust).
Dispose contaminated material as waste according to item 13.

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
No special precautions are necessary if used correctly
Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: Keep container tightly sealed.
Storage class: 10

7.3 Specific end use(s)
No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities:
No further data; see section 7.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **DNELs**		
4259-15-8 zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)		
Oral	DNEL/general population/Systemic effects/Long-term	0.19 mg/kg/24h (consumer)
Dermal	DNEL / Workers / Systemic effects / Long-term	9.6 mg/kg/24h (worker)
	DNEL/general population/Systemic effects/Long-term	4.8 mg/kg/24h (consumer)
Inhalative	DNEL / Workers / Systemic effects / Long-term	6.6 mg/m3 (worker)
	DNEL/general population/Systemic effects/Long-term	1.67 mg/m3 (consumer)

· **PNECs**		
4259-15-8 zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)		
Oral	PNEC / Predators / Secondary poisoning	8.33 mg/kg food (secondary poisoning (predators))
	PNEC / Aquatic organisms / Freshwater	0.004 mg/l (aquatic organisms)
	PNEC / Aquatic organisms / Marine water	0.0046 mg/l (aquatic organisms)
	PNEC/Aquatic org/intermittent releases(freshwater)	0.044 mg/l (aquatic organisms)
	PNEC/Aquatic organisms/Sewage treatment plant/STP	3.8 mg/l (aquatic organisms)
	PNEC / Aquatic organisms / Sediment (freshwater)	0.322 mg/kg (aquatic organisms)
	PNEC / Aquatic organisms / Sediment (marine water)	0.0322 mg/kg (aquatic organisms)
	PNEC / Terrestrial organism / Soil	0.0619 mg/kg (terrestrial organisms)

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:
General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.

Respiratory protection:
Not necessary if room is well-ventilated.
Respiratory protection if formation of aerosol or mist: use mask with filter type A2, A2/P2 or ABEK.

Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves
Protective gloves to EN374, resistant to oil in use. Standard EN 374 Level 3 control G1
The selection of the suitable gloves does not only depend on the material, but also on
further marks of quality and varies from manufacturer to manufacturer.
Fluorocarbon rubber (Viton)
Nitrile rubber, NBR
Recommended thickness of the material: ^{3} 0.4 mm
Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
For the mixture of chemicals mentioned below the penetration time has to be at least 60 minutes (Permeation according to EN 374 Part 3: Level 1).

Eye protection:	Goggles recommended during refilling
Body protection:	Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information		
Appearance:		
Form:	Pasty	
Colour:	yellow-green	
Odour:	Characteristic	
Odour threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/freezing point:		Undetermined.
Initial boiling point and boiling range:		Undetermined.
Flash point:	>200 °C	
Flammability (solid, gas):	Not applicable.	
Decomposition temperature:	Not determined.	
Auto-ignition temperature:	Product is not selfigniting.	
Explosive properties:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapour pressure:	Not determined.	
Density at 20 °C:	0.93 g/cm^3 (ASTM D 4052)	
Relative density	Not determined.	
Vapour density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with water:		Not miscible or difficult to mix.
Partition coefficient: n-octanol/water:		Not determined.
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	

9.2 Other information
No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
No further relevant information available.

10.2 Chemical stability
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions
No dangerous reactions known.

10.4 Conditions to avoid
No further relevant information available.

10.5 Incompatible materials:
No further relevant information available.

10.6 Hazardous decomposition products:
No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**		
4259-15-8 zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)		
Oral	LD50	3,100 mg/kg (rat)
	NOAEL	125 mg/kg/24h (rat)
Dermal	LD50	5,000 mg/kg (rabbit)

Primary irritant effect:
Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)	
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
STOT-single exposure	Based on available data, the classification criteria are not met.
STOT-repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity

· **Aquatic toxicity:**	
4259-15-8 zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	
LC50	46 mg/l/96h (fish)
LL50	4.4 mg/l/96h (fish)
EL50	75 mg/l/48h (aquatic invertebrates)
EL50	240-410 mg/l/72h (algae / cyanobacteria)
NOEC	0.4-0.8 mg/l/21d (aquatic invertebrates)
NOELR	3.2 mg/l/96h (fish)
NOELR	32 mg/l/48h (aquatic invertebrates)
LOEC	0.8 mg/l/72h (aquatic invertebrates)

12.2 Persistence and degradability
No further relevant information available.

12.3 Bioaccumulative potential

4259-15-8 zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	
Partition coefficient	3.59 [---] (log Kow) (Bioaccumulation)

12.4 Mobility in soil No further relevant information available.
Ecotoxical effects:
Remark: Harmful to fish
Additional ecological information:
General notes:
Water hazard class 2 (according to Appendix 1 AWSV): significantly hazardous to water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Harmful to aquatic organisms

12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

12.6 Other adverse effects
No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Contact waste processors for recycling information.

· **European waste catalogue**	
12 01 12*	spent waxes and fats

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number
ADR/RID/ADN, IMDG, IATA Void

14.2 UN proper shipping name
ADR/RID/ADN, IMDG, IATA Void

14.3 Transport hazard class(es)
ADR/RID/ADN, ADN, IMDG, IATA
Class Void

14.4 Packing group
ADR/RID/ADN, IMDG, IATA Void

14.5 Environmental hazards:
Not applicable.

14.6 Special precautions for user
Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable.

UN "Model Regulation": Void

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Directive 2012/18/EU
Named dangerous substances - ANNEX I None of the ingredients is listed.
REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

15.2 Chemical safety assessment:
A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
The classification of the mixture was carried out by calculation in accordance with the rules laid down in Annex I of Regulation (EC) No 1272/2008.
No special training instructions to ensure protection of human health and environment are required.

Relevant phrases
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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