Printing date 22.01.2019

Version number 1

Revision: 20.04.2018

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

· 1.1 Product identifier

· Trade name: Shimano PTFE lube

- Int. code: 93701001002
- 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 Lubricant

- **Product intended for:** The consumer market.
- · Manufacturer/Supplier:

Shimano

High Tech Campus 26 NL-5656 AG Eindhoven Tel: +31 (0)34 1272264

Fax: -

• Emergency telephone number: Shimano +31 (0)34 1272264

SECTION 2: Hazards identification

 \cdot 2.1 Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008 The product is not classified, according to the CLP regulation.
- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · 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: Void
- 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
- General information:
- Immediately remove any clothing soiled by the product.
- No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- \cdot After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · 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.

(Contd. on page 2)

Printing date 22.01.2019

Version number 1

Revision: 20.04.2018

Trade name: Shimano PTFE lube

- (Contd. of page 1) • **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: No special measures required.
- 6.3 Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- 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 measures required.

- · 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: None.
- 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 item 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.

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- \cdot General protective and hygienic measures:
- The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 3)

GB

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Printing date 22.01.2019

2

Version number 1

Revision: 20.04.2018

Trade name: Shimano PTFE lube

· Eye protection: Goggles recommended during refilling

SECTION 9: Physical and chemical properties			
• 9.1 Information on basic physical and c	hemical properties		
· General Information			
· Appearance:			
Form:	Oily		
Colour:	Yellow		
· 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:	245 °C (ASTM D-93)		
· Flammability (solid, gas):	Not applicable.		
· Decomposition temperature:	Not determined.		
• Auto-ignition temperature:	Product is not selfigniting.		
· Explosive properties:	Not determined		
· Explosion limits:			
Lower:	Not determined.		
Upper:	Not determined.		
· Vapour pressure:	Not determined.		
· Density at 20 °C:	$0.885 \ g/cm^3$		
· 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 at 40 °C:	104 mm ² /s		
	101 101/10		
· Solvent content:	0.01		
VOC (EC)	0%		
· 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.

(Contd. on page 4)

GB

Printing date 22.01.2019

Version number 1

Revision: 20.04.2018

Trade name: Shimano PTFE lube

· 10.6 Hazardous decomposition products: No dangerous decomposition products known.

(Contd. of page 3)

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · 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.
- \cdot Carcinogenicity Based on available data, the classification criteria are not met.
- $\cdot \textit{Reproductive toxicity Based on available data, the classification criteria are not met.}$
- $\cdot \textit{STOT-single exposure Based on available data, the classification criteria are not met.}$
- $\cdot \textit{STOT-repeated exposure Based on available data, the classification criteria are not met.}$

• Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Not known to be hazardous to water.
- · 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 Disposal must be made according to official regulations.*
- · Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

• 14.1 UN-Number		
· ADR, ADN, IMDG, IATA	Void	
· 14.2 UN proper shipping name		
· ADR, ADN, IMDG, IATA	Void	
· 14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA		
· Class	Void	
· 14.4 Packing group		
· ADR, IMDĞ, IATA	Void	

Printing date 22.01.2019Version number 1Revision: 20.04.2018

Trade name: Shimano PTFE lube

		(Contd. of page 4)
· 14.5 Environmental hazards:	Not applicable.	
· 14.6 Special precautions for user	Not applicable.	
· 14.7 Transport in bulk according to Anne	ex 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

· List of carcinogens

None of the ingredients is listed.

· List of mutagenic substances

None of the ingredients is listed.

 \cdot Non-exhaustive list of reprotoxic substances - Fertility

None of the ingredients is listed.

· Non-exhaustive list of reprotoxic substances - Development

None of the ingredients is listed.

· Non-exhaustive list of reprotoxic substances - Breastfeeding

None of the ingredients is listed.

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I Substance is not listed.

· National regulations:

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

· 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.

• 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)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

· Sources http://echa.europa.eu

 \cdot * Data compared to the previous version altered.

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