according to Regulation (EC) No 1907/2006 (REACH) as amended

M - Wave Clean Guard (K)

Date of creation	01. June 2015	Revision no.	1
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

M - Wave Clean Guard (K)

Substance / mixture

mixture

Number

150529

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

Intended use of the mixture

cleaning and maintenance of bicycles

Not recommended use of the mixture

not available

1.3. Details of the supplier of the safety data sheet Distributor

Name or trade name

Messingschlager GmbH

Address

Phone

Manufacturer

Hassbergstr. 45, Baunach, 96148

Germany

+49 9544/944445 sa@messingschlager.com WWW.messingschlager.com

E-mail Web address

Name or trade name

Address

Phone

Fax

E-mail

Web address

Competent person responsible for the safety data sheet

Name

E-mail

1.4. Emergency telephone number

Poisoning information centre, Na Bojišti 1, Praha, Czech Republic, Tel.: non-stop +420 224 919 293 or +420 224 915 402, Information on health risks only - acute poisoning of humans and animals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Eye Irrit. 2, H319

Full text of all classifications and H-phrases is given in the section 16.

The most serious adverse physico-chemical effects

Unknown

The most serious adverse effects on human health and the environment

Causes serious eye irritation.

2.2. Label elements

Hazard pictogram



Signal word

Warning

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Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

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.

2.3. Other hazards

When used for its intended purpose it is unlikely. The mixture does not meet the criteria for PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of substances specified below and additives.

Mixture contains these hazardous substances and substances with the highest permissible concentration

in the working environment

Identification numbers	Name of the substance	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note.
Index: 603-052-00-8 CAS: 5131-66-8 EC: 225-878-4 Registration number: 01-2119475527-28	3-butoxypropan-2-ol	0,1-2,5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Specific concentration limit: Skin Irrit. 2, H315: C ≥ 20 % Eye Irrit. 2, H319: C ≥ 20 %	
CAS: 7320-34-5 EC: 230-785-7	Tetrapotassium pyrophosphate	0,1-2	Eye Irrit. 2, H319	
CAS: 68515-73-1 EC: 500-220-1	alkyl polyglucoside	0,1-1,82	Eye Dam. 1, H318	
CAS: 68439-46-3 EC: 500-446-0	Alcohols, C9-C11 Ethoxylated, <2,5 EO	0,1-1,1	Acute Tox. 4, H302 Eye Dam. 1, H318	

Full text of all classifications and H-phrases is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this Safety Data Sheet.

Inhalation

The product does not cause health complications in the prescribed way of use. In other cases, interrupt the exposure, the affected person to transfer to the fresh air, calm, do not let go. Depending on the situation, it is advisable to wash the oral cavity or the nose with water. Ensure medical treatment, especially if cough, shortness of breath or other symptoms persist. If it does not breathe artificial respiration from the lungs into the lungs and call the doctor.

Skin contact

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

Eye contact

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

Ingestion

DO NOT INDUCE VOMITING! Rinse out the mouth with water and provide 2-5 dL of water. Provide medical treatment if the person has any health problems.

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4.2. Most important symptoms and effects, both acute and delayed

Inhalation

Not expected.

Skin contact

It is not expected. Sensitive individuals may be irritated, reddened.

Eye contact

Irritation, lacrimation, pain.

Ingestion

Irritation, nausea.

4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist

Unsuitable extinguishing media

water - full iet

5.2. Special hazards arising from the substance or mixture

Fire produces heavy, black smoke, with potential development of carbon monoxide and dioxide and other toxic gases. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Prevent contact with skin and eyes.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

6.4. Reference to other sections

See the Section 7, 8 and 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent contact with skin and eyes. Wash hands and exposed parts of the body thoroughly after handling. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose.

Storage class

Content

Type of packaging Material of package 12 - Other non-combustible liquids

0,5 I, 1 I, 5 I Bottle / Canister

PE-HD (2), Polyethylene - high-density, linear (Plastics)



PE-HD

min 5 °C, max 100 °C

Storage temperature

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

none

8.2. Exposure controls

Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles.

Skin protection

Hand protection: Protective gloves resistant to the product. Contaminated skin should be washed thoroughly.

Respiratory protection

It is not needed.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state liquid at 20°C color green
Odour according to fragrance

Odour threshold data not available
pH 9.5 (undiluted at 20 °C)
Melting point/freezing point data not available
Initial boiling point and boiling range data not available
Flash point data not available
Evaporation rate data not available
Flammability (solid, gas) data not available

Upper/lower flammability or explosive limits

flammability limits data not available explosive limits data not available vapour pressure data not available vapour density data not available Relative density data not available data not available

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Solubility(ies)

solubility in water

soluble data not available solubility in fats data not available Partition coefficient: n-octanol/water Auto-ignition temperature data not available Decomposition temperature data not available Viscosity data not available data not available **Explosive properties** data not available Oxidising properties

They are not available

9.2. Other information

> 1.0-1.1 g/cm3 Density ignition temperature data not available

SECTION 10: Stability and reactivity

10.1. Reactivity

The mixture is non-flammable.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

The product is stable under normal conditions.

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents. Thereby a dangerous exothermic reaction will be prevented.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous products are formed at high temperature and in fire, such as carbon monoxide and carbon dioxide, heavy smoke and nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

No toxicological data is available for the mixture.

Acute toxicity

Based on available data the classification criteria are not met.

3-butoxypropan-2-ol

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD50	3300 mg/kg		Rat	
Dermal	LD50	>5000 mg/kg		Rabbit	
Inhalation (vapor)	LC50	>651 ppm	4 hour	Rat	
Inhalation	LC50	>50 mg/l	4 hour	Rat (Rattus norvegicus)	

Alcohols, C9-C11 Ethoxylated, <2,5 EO

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD50	>2000 mg/kg		Rat	
Inhalation	LC50	>1.6 mg/l of air		Rat	
Dermal	LD50	>2000 mg/kg		Rat	

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alkyl polyglucoside

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD50	>2000 mg/kg		Rat	
Dermal	LD50	>2000 mg/kg		Rabbit	

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.

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.

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

Toxicity for specific target organ - 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

Acute toxicity

Data for the mixture are not available.

3-butoxypropan-2-ol

Parameter	Value	Time of exposure	Species	Environment
EC ₅₀	>1000 mg/l	48 hour	Daphnia (Daphnia magna)	
EC50	>1000 mg/l	96 hour	Algae (Selenastrum capricornutum)	
LC50	>560-1000 mg/l	96 hour	Fishes (Poecilia reticulata	

Alcohols, C9-C11 Ethoxylated, <2,5 EO

Parameter	Value	Time of exposure	Species	Environment
LCso	5-7 mg/l	96 hour	Fishes (Oncorhynchus mykiss)	
EC ₅ o	2.5 mg/l	48 hour	Daphnia (Daphnia magna)	

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Alcohols, C9-C11 Ethoxylated, <2,5 EO

Parameter	Value	Time of exposure	Species	Environment
EC50	1.4 mg/l	96 hour	Algae (Selenastrum capricornutum)	

alkyl polygłucoside

Parameter	Value	Time of exposure	Species	Environment
LC50	100.81 mg/l	96 hour	Fishes (Branchydanio rerio)	
EC50	>100 mg/l	48 hour	Daphnia (Daphnia magna)	
EC50	27.22 mg/l	72 hour	Algae (Selenastrum capricornutum)	

They are not available

12.2. Persistence and degradability

Data not available.

12.3. Bioaccumulative potential

Not available.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Legislation of waste

Council Directive 75/442/EEC on waste, as amended. Decree No. 383/2001 Coll., on details regarding waste handling as amended. Decree No. 93/2016 Coll., (waste catalogue) as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Code of type of waste

20 01 29 detergents containing dangerous substances

Code of type of waste packaging

15 01 10 packaging containing residues of or contaminated by dangerous substances

15 01 02 plastic packaging

SECTION 14: Transport information

14.1. UN number

Not subject to ADR.

14.2. UN proper shipping name

not available

14.3. Transport hazard class(es)

not available

14.4. Packing group

not available

according to Regulation (EC) No 1907/2006 (REACH) as amended

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14.5. Environmental hazards

not available

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not available

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended. The Act No. 350/2011 Coll., on Chemical Substances and Chemical Preparations as amended (the Chemical Act). Decree No. 432/2003 Coll., laying down conditions for assigning categories to individual jobs, limit values of indices from biological exposure tests, conditions for the sampling of biological materials for biological exposure and the particulars of the reports on work with asbestos and biological agents as amended.

15.2. Chemical safety assessment

not available

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eve irritation.

Guidelines for safe handling used in the safety data sheet

L101	if inedical advice is needed, have product container of label at fland.
P102	Keep out of reach of children.
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.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

	as per the Section 1. The user is responsible for adherence to all related health protection regulations.					
Key to abbreviations and acronyms used in the safety data sheet						

ADR European agreement concerning the international carriage of dangerous goods by road BCF Bioconcentration Factor

CAS	Chemical Abstracts Service
CLP	Regulation (FC) No 1272/2008 on classification, labelling and packaging of substance and

mixtures

DNEL Derived no-effect level

EC Identification code for each substance listed in EINECS

EC50 Concentration of a substance when it is affected 50% of the population EINECS European Inventory of Existing Commercial Chemical Substances

EmS Emergency plan EU European Union

IATA International Air Transport Association

IBC International Code For The Construction And Equipment of Ships Carrying Dangerous

Chemicals

ICso Concentration causing 50% blockade
ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous Goods

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						Date of creation	01. June 2015	Revision no.	1
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INCI	International Nomenclature	of Cosmetic Ingredients							
ISO	International Organization for Standardization								
IUPAC International Union of Pure and Applied Chemistry									
LC50	Lethal concentration of a su population	bstance in which it can be e	xpected death of 50% of the						
LD50 Lethal dose of a substance in which it can be expected death of 50% of the popu									
LOAEC Lowest observed adverse effect concentration									
LOAEL Lowest observed adverse effect level									
log Kow									
MARPOL	International Convention for	the Prevention of Pollution	From Ships						
NOAEC	No observed adverse effect	concentration							
NOAEL	No observed adverse effect	level							
NOEC	No observed effect concentr	ation							
NOEL	No observed effect level								
OEL	Occupational Exposure Limit	:s							
PBT	Persistent, Bioaccumulative	and Toxic							
PNEC	Predicted no-effect concentr	ation							
ppm	Parts per million								
REACH	Registration, Evaluation, Au	thorisation and Restriction o	of Chemicals						
RID	Agreement on the transport	of dangerous goods by rail							
UN	Four-figure identification nu Regulations	mber of the substance or ar	ticle taken from the UN Model						
UVCB	Substances of unknown or v materials	ariable composition, comple	ex reaction products or biological						
VOC	Volatile organic compounds								
vPvB	Very Persistent and very Bio	accumulative							

Acute Tox.	Acute toxicity
Eye Dam.	Serious eye damage
Eye Irrit.	Eye irritation
Skin Irrit.	Skin irritation

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. The Act No. 350/2011 Coll., on Chemical Substances and Chemical Preparations as amended. First aid principles after the exposure to the chemicals (Zásady pro poskytování první pomoci při expozici chemickým látkám, doc. MUDr. Daniela Pelclová, CSc., MUDr. Alexandr Fuchs, CSc., MUDr. Miroslava Hornychová, CSc., MUDr. Zdeňka Trávníčková, CSc., Jiřina Fridrichovská, prom. chem.). Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.