

SAFETY DATA SHEET

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

M - Wave Oil Guard Bio

| | | | |
|------------------|--------------------|---------|-----|
| Date of creation | 28. April 2005 | | |
| Date of revision | 29. September 2017 | Version | 2.0 |

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

- 1.1. Product identifier**
Substance / mixture M - Wave Oil Guard Bio
Number mixture
Other names of the mixture EKO 50
oil for lubricating bicycle
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Intended use of the mixture bio-degradable, multifunctional lubricating fluid
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 | Hassbergstr. 45, Baunach, 96148 Germany |
| Phone | +49 9544/944445 |
| E-mail | sa@messingschlager.com |
| Web address | WWW.messingschlager.com |

Manufacturer

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 not classified as dangerous according to Regulation (EC) No 1272/2008.

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

unknown

2.2. Label elements

none

2.3. Other hazards

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

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SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

A mixture of rapeseed oil 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. |
|---------------------------------|-----------------------|---------------------|--|-------|
| CAS: 8002-13-9 EC: 232-299-0 | řepkový olej | 90-99 | | |

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

Terminate the exposure immediately; move the affected person to fresh air.

Skin contact

Remove contaminated clothes.

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.

Ingestion

Rinse out the mouth with clean water. In the event of issues, find medical help.

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

Inhalation

Not expected.

Skin contact

Not expected.

Eye contact

Not expected.

Ingestion

Not expected.

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

Accommodate extinguishing components to the location of fire.

Unsuitable extinguishing media

not available

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Follow the instructions in the Sections 7 and 8.

6.2. Environmental precautions

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

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6.3. Methods and material for containment and cleaning up

After removal of the product, wash the contaminated site with plenty of water.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of gases and vapours in flammable or explosive concentrations and concentrations exceeding the occupational exposure limits. The product should be used only in areas where it is not in contact with open fire and other ignition sources. No smoking. Protect against direct sunlight. Electrostatic charge may be formed during use; use only earthed piping (tubing) when repumping. Use of antistatic clothes and footwear is recommended. Use non-sparking tools. Do not inhale gases and vapours. Prevent contact with skin and eyes. 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. Do not expose to sunlight. Do not store together with strong oxidizing agents. Keep away from food and beverages. Keep only in containers that correspond to the original package.

Storage class
Content
Type of packaging
Material of package

12 - Other non-combustible liquids
100 ml
bottle, dropper
PE-HD (2), Polyethylene - high-density, linear (Plastics)



PE-HD
min 0 °C, max 40 °C

Storage temperature

7.3. Specific end use(s)

Observe instructions on the product label.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

none

8.2. Exposure controls

Follow usual measures for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. 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 or face shield (based on the nature of the work performed).

Skin protection

When handling in long-term or repeatedly, use protective gloves.

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.

More information

Avoid spraying into the eyes, mouth, skin contamination. Avoid contact of food and beverages.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|----------------------------------|
| Appearance | |
| Physical state | liquid at 20°C |
| color | yellow |
| Odour | oily |
| Odour threshold | data not available |
| pH | data not available |
| Melting point/freezing point | -30 °C |
| Initial boiling point and boiling range | data not available |
| Flash point | >280 °C |
| 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 |
| Solubility(ies) | |
| solubility in water | insoluble |
| solubility in fats | data not available |
| Partition coefficient: n-octanol/water | data not available |
| Auto-ignition temperature | >370 °C |
| Decomposition temperature | data not available |
| Viscosity | data not available |
| Kinematic viscosity | 36-44 mm ² /s at 40°C |
| Explosive properties | data not available |
| Oxidising properties | data not available |
| They are not available | |

9.2. Other information

| | |
|----------------------|----------------------------------|
| Density | 0.915 g/cm ³ at 15 °C |
| 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. Keep away from flames, sparks, overheating and frost and temperatures above 250 ° C.

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 outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

No toxicological data is available for the mixture.

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Acute toxicity

Based on available data the classification criteria are not met.

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.

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.

Data not available

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

The product contains no substances with an effect against active action of microorganisms.

Data not available

12.2. Persistence and degradability

The product is not biodegradable.

12.3. Bioaccumulative potential

Insignificant.

12.4. Mobility in soil

The product is insoluble in water. Contamination of water courses may occur in case of rain.

12.5. Results of PBT and vPvB assessment

The product is not classified as PBT or vPvB.

12.6. Other adverse effects

The product is slightly soluble in water, and the sewage treatment plants easily be eliminated mechanically (abiotic processes). Avoid leak into the waste water system and into the countryside. The product spreads on the surface, where it forms an impenetrable barrier to air and leads to the death of aquatic organisms.

SECTION 13: Disposal considerations

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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

13 02 07 readily biodegradable engine, gear and lubricating oils

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

14.5. Environmental hazards

not available

14.6. Special precautions for user

not available

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

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.

Key to abbreviations and acronyms used in the safety data sheet

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

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| BCF | Bioconcentration Factor |
| CAS | Chemical Abstracts Service |
| CLP | Regulation (EC) 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 |
| EC ₅₀ | 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 |
| IC ₅₀ | Concentration causing 50% blockade |
| ICAO | International Civil Aviation Organization |
| IMDG | International Maritime Dangerous Goods |
| INCI | International Nomenclature of Cosmetic Ingredients |
| ISO | International Organization for Standardization |
| IUPAC | International Union of Pure and Applied Chemistry |
| LC ₅₀ | Lethal concentration of a substance in which it can be expected death of 50% of the population |
| LD ₅₀ | Lethal dose of a substance in which it can be expected death of 50% of the population |
| LOAEC | Lowest observed adverse effect concentration |
| LOAEL | Lowest observed adverse effect level |
| log K _{ow} | Octanol-water partition coefficient |
| 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 concentration |
| NOEL | No observed effect level |
| OEL | Occupational Exposure Limits |
| PBT | Persistent, Bioaccumulative and Toxic |
| PNEC | Predicted no-effect concentration |
| ppm | Parts per million |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| RID | Agreement on the transport of dangerous goods by rail |
| UN | Four-figure identification number of the substance or article taken from the UN Model Regulations |
| UVCB | Substances of unknown or variable composition, complex reaction products or biological materials |
| VOC | Volatile organic compounds |
| vPvB | Very Persistent and very Bioaccumulative |

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.

The changes (which information has been added, deleted or modified)

The version 4.0 replaces the SDS version from 06.03.2017. Changes were made in sections 2, 13, 15 and 16.

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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.