365900/01

SAFETY DATA SHEET

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

M - Wave BRAKE FLUID DOT 5.1

Date of creation	03. February 2016	Revision no.	
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier — M - Wave BRAKE FLUID DOT 5.1

Substance / mixture — mixture

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

Intended use of the mixture — brake fluid

Not recommended use of the mixture — The product should not be used in ways other then those referred in Section 1.

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	[redacted]
Address	
Phone	
Fax	
E-mail	
Web address	

Competent person responsible for the safety data sheet

Name	[redacted]
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

Precautionary statements

P102	Keep out of reach of children.
P280	Wear protective gloves/protective clothing/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.
P501	Dispose of contents/container to in accordance with local regulations.

Supplemental information

EUH 210	Safety data sheet available on request.

2.3. Other hazards

Substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No 1272/2008.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Synthetic brake fluid - a mixture of synthetic ingredients.

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: 603-183-00-0 CAS: 143-22-6 EC: 205-592-6 Registration number: 01-2119475107-38	2-[2-(2-Butoxyethoxy)ethoxy]ethanol	10-16	Eye Dam. 1, H318	1
Index: 603-140-00-6 CAS: 111-46-6 EC: 203-872-2 Registration number: 01-2119457857-21	2,2' -oxybisethanol	1-5	Acute Tox. 4, H302 STOT RE 2, H373	
Index: 603-107-00-6 CAS: 111-77-3 EC: 203-906-6 Registration number: 01-2119475100-52	2-(2-methoxyethoxy)ethanol	1-<3	Repr. 2, H361d	1, 2
Index: 603-096-00-8 CAS: 112-34-5 EC: 203-961-6 Registration number: 01-2119475104-44	2-(2-butoxyethoxy)ethanol	1-1,9	Eye Irrit. 2, H319	1, 2

Notes

1 Substance for which exposure limits of Community for working environment exist.

2 The use of the substance is restricted by Annex XVII of REACH Regulation.

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

If any health problems are manifested or if in doubt, inform a doctor and show him information from this Safety Data Sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled.

Inhalation

inapt - Liquid

Skin contact

Remove contaminated clothing. Wash the affected skin with lukewarm water and soap or use appropriate cleanser. When irritation persists, seek medical attention.

Eye contact

Holding the eyelids open, and at least 15 minutes, rinse with clean, if possible lukewarm, running water and seek medical advice.

Ingestion

Place the victim in peace. Rinse mouth with water (only if the affected person is conscious); Never induce vomiting. Seek medical advice immediately and show the container or label.

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

Inhalation

not available

Skin contact

not available

Eye contact

not available

Ingestion

not available

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

Ensure patient adequate ventilation and oxygenation. There is no specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

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 jet

5.2. Special hazards arising from the substance or mixture

Fire produces 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

Remove all ignition sources; provide sufficient ventilation. Use personal protective equipment for work. Follow the instructions contained in chapters 7 and 8. The product forms a slick surfaces - danger of slipping.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water. Do not allow to enter drains.

6.3. Methods and material for containment and cleaning up

Cover the preparation with a suitable (not flammable) absorption material (sand, diatomaceous earth, soil or other suitable absorbent materials such. Our DRY Absorbent, etc.), Gather in tightly sealed containers and remove as hazardous waste. Collected material should be Disposed of in accordance with locally valid Regulations. When the release of large amounts of preparation inform the fire brigade and the Environment department of the District Office. After removal of the contaminated wash with plenty of water or other suitable detergent.

6.4. Reference to other sections

not available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent contact with skin and eyes. Wear personal protective equipment according to chapter 8. Observe valid safety legislation and upholding health. Aerate and ventilate storerooms and workplaces.

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. At ambient temperature in the vapor space of containers Flammable mixtures may exist. Minimize sources of ignition, such as. An increase in static electricity, heat and flame. Store in the following materials: Carbon steel. Stainless steel, steel drums phenolic liner.

Storage class	12 - Other non-combustible liquids
Content	0,1 and 1 l
Type of packaging	bottle
Material of package	HDPE (2), High-density (linear) polyethylene (Plastics)

HDPE

Storage temperature	min 0 °C, max 40 °C

The specific requirements or rules relating to the substance/mixture

Keep only in containers that correspond to the original package.

7.3. Specific end use(s)

Observe instructions on the product label.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

European Union

Name of the substance (component)	Type	Time of exposure	Value	Note	Source
2-[2-(2-Butoxyethoxy)ethoxy] ethanol (CAS: 143-22-6)	TWA		50 mg/m³		
	TWA		9 ppm		
2-(2-methoxyethoxy)ethanol (CAS: 111-77-3)	OEL	8 hours	50,1 mg/m³		EU limits
	OEL	8 hours	10 ppm		
2-(2-butoxyethoxy)ethanol (CAS: 112-34-5)	OEL	8 hours	67,5 mg/m³		EU limits
	OEL	8 hours	10 ppm		
	OEL	Short-term	101,2 mg/m³		
	OEL	Short-term	15 ppm		

United Kingdom of Great Britain and Northern Ireland

Name of the substance (component)	Type	Time of exposure	Value	Note	Source
2,2' -oxybisethanol (CAS: 111-46-6)	WEL	8 hours	101 mg/m³		Gestis
	WEL	8 hours	23 ppm		
2-(2-methoxyethoxy)ethanol (CAS: 111-77-3)	WEL	8 hours	50,1 mg/m³		Gestis

United Kingdom of Great Britain and Northern Ireland

Name of the substance (component)	Type	Time of exposure	Value	Note	Source
2-(2-methoxyethoxy)ethanol (CAS: 111-77-3)	WEL	8 hours	10 ppm		Gestis
2-(2-butoxyethoxy)ethanol (CAS: 112-34-5)	WEL	8 hours	67,5 mg/m³		Gestis
	WEL	Short-term	101,2 mg/m³		
	WEL	8 hours	10 ppm		
	WEL	Short-term	15 ppm		

DNEL

2-(2-butoxyethoxy)ethanol

Workers / consumers	Route of exposure	Value	Effect	Determining the value of
Workers	Dermal	20 mg/kg bw/day	Systemic chronic effects	
Workers	Inhalation	67.5 mg/m³	Local chronic effects	
Workers	Dermal	20 mg/kg bw/day	Systemic chronic effects	
Consumers	Inhalation	50.6 mg/m³	Local acute effects	
Consumers	Oral	1.25 mg/kg bw/day	Systemic chronic effects	
Consumers	Inhalation	34 mg/m³	Systemic chronic effects	
Workers	Inhalation	101.2 mg/m³	Local acute effects	

2-(2-methoxyethoxy)ethanol

Workers / consumers	Route of exposure	Value	Effect	Determining the value of
Workers	Dermal	0.53 mg/kg bw/day	Systemic chronic effects	
Workers	Inhalation	50.1 mg/m³	Systemic chronic effects	
Consumers	Oral	1.5 mg/kg bw/day	Systemic chronic effects	
Consumers	Inhalation	25 mg/m³	Systemic chronic effects	
Consumers	Dermal	0.27 mg/kg bw/day	Systemic chronic effects	

2,2' -oxybisethanol

Workers / consumers	Route of exposure	Value	Effect	Determining the value of
Workers	Dermal	106 mg/kg bw/day	Systemic chronic effects	
Workers	Inhalation	60 mg/m³	Systemic chronic effects	
Consumers	Dermal	53 mg/kg bw/day	Systemic chronic effects	
Consumers	Inhalation	12 mg/m³	Systemic chronic effects	

2-[2-(2-Butoxyethoxy)ethoxy]ethanol

Workers / consumers	Route of exposure	Value	Effect	Determining the value of
Workers	Dermal	50 mg/kg bw/day	Systemic chronic effects	
Workers	Inhalation	195 mg/m³	Systemic chronic effects	
Consumers	Oral	2.5 mg/kg bw/day	Systemic chronic effects	
Consumers	Inhalation	117 mg/m³	Systemic chronic effects	
Consumers	Dermal	25 mg/kg bw/day	Systemic chronic effects	

PNEC

2-(2-butoxyethoxy)ethanol

Route of exposure	Value	Determining the value of
Drinking water	1 mg/l	
Seawater	0.1 mg/l	
Freshwater sediment	4 mg/kg	
Sea sediments	0.4 mg/kg	

2-(2-butoxyethoxy)ethanol

Route of exposure	Value	Determining the value of
Microorganisms in wastewater treatment plants	200 mg/l	

2-(2-methoxyethoxy)ethanol

Route of exposure	Value	Determining the value of
Drinking water	12 mg/l	
Seawater	1.2 mg/l	
Freshwater sediment	44.4 mg/kg	
Sea sediments	0.44 mg/kg	
Soil (agricultural)	2.44 mg/kg	
Oral	90 mg/kg	
Microorganisms in wastewater treatment plants	10000 mg/l	

2,2' -oxybisethanol

Route of exposure	Value	Determining the value of
Drinking water	10 mg/l	
Seawater	1 mg/l	
Freshwater sediment	20.9 mg/kg	
Sea sediments	2.09 mg/kg	
Soil (agricultural)	1.53 mg/kg	
Microorganisms in wastewater treatment plants	199.5 mg/l	

2-[2-(2-Butoxyethoxy)ethoxy]ethanol

Route of exposure	Value	Determining the value of
Freshwater environment	1.5 mg/l	
Seawater	0.15 mg/l	
Freshwater sediment	5.77 mg/kg	
Sea sediments	0.13 mg/kg	
Soil (agricultural)	0.45 mg/kg	
Food chain	111 mg/kg	
Microorganisms in wastewater treatment plants	200 mg/l	

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

Hand protection: Protective gloves resistant against the product. Observe recommendations of the particular manufacturer of the gloves in the choice of their appropriate thickness, material and permeability. Use barrier creams for skin protection, they should however not be applied once exposure has occurred. Observe other recommendations of the manufacturer. Other protection: Protective antistatic clothing made of natural fibres (cotton) or synthetic fibres resistant against elevated temperatures. Contaminated skin should be washed thoroughly.

Respiratory protection

Use only with adequate ventilation. When possible inhalation use protective mask with filter against organic vapors and aerosols. Type A-P2 (boiling point> 65°C). Crash, fire, high concentrations use self-contained breathing apparatus.

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	colorless to yellow
Odour	data not available
Odour threshold	data not available
pH	7 - 11.5 (undiluted)
Melting point/freezing point	<-50 °C
Initial boiling point and boiling range	>260 °C
Flash point	>120 °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	<0.2 kPa at 20 °C
Vapour density	data not available
Relative density	data not available
Solubility(ies)	
solubility in water	soluble
solubility in fats	data not available
Partition coefficient: n-octanol/water	<2
Auto-ignition temperature	>300 °C
Decomposition temperature	300 °C
Viscosity	5 - 10 cSt při 20oC
Explosive properties	data not available
Oxidising properties	data not available
They are not available	

9.2. Other information

Density	1.03 - 1.09 g/cm^3 at 20 °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

Glycol ethers may form during storage of peroxides, can be reacted with light alloys to form hydrogen.

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 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.

2-(2-butoxyethoxy)ethanol

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD_{50}	3384 mg/kg		Rat (Rattus norvegicus)	
Dermal	LD_{50}	2700 mg/kg		Rabbit	

2,2' -oxybisethanol

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD_{50}	12565 mg/kg		Rat	
Dermal	LD_{50}	11890 mg/kg		Rat	
Inhalation (dust/mist)	LC_{50}	0.13 mg/l	4 hour	Rat (Rattus norvegicus)	
Oral	LD_{50}	19600 mg/kg bw			

2-[2-(2-Butoxyethoxy)ethoxy]ethanol

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD_{50}	5170 mg/kg bw			
Dermal	LD_{50}	3540 mg/kg		Rabbit	
Dermal	LD_{50}	3540 mg/kg bw			
Inhalation (dust/mist)	LC_{50}	>2.4 mg/l	4 hour		
Oral	LD_{50}	5170 mg/kg		Rat (Rattus norvegicus)	

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Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD_{50}	>5000 mg/kg		Rat	
Dermal	LD_{50}	>3000 mg/kg		Rabbit	

Skin corrosion/irritation

Based on available data the classification criteria are not met.

Serious eye damage/irritation

It 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
Some ingredients show these effects.

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.
They are not available

SECTION 12: Ecological information

12.1. Toxicity

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

2,2' -oxybisethanol

Parameter	Method	Value	Time of exposure	Species	Environment
LC_{50}		75200 mg/l		Fishes (Oncorhynchus mykiss)	
EC_{50}		>10000 mg/l	72 hour	Other aquatic organisms	

2-[2-(2-Butoxyethoxy)ethoxy]ethanol

Parameter	Method	Value	Time of exposure	Species	Environment
LC_{50}		>2200 mg/l	96 hour	Fishes (Oncorhynchus mykiss)	
EC_{50}		>500 mg/l	48 hour	Daphnia (Daphnia magna)	
EC_{50}		>5000 mg/l	16 hour	Other aquatic organisms	
EC_{50}		2210 mg/l	72 hour	Other aquatic organisms	
ErC_{50}		2490 mg/l	72 hour	Algae and other aquatic plants	
Log Pow		0.51			
Log Koc		10			

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Parameter	Method	Value	Time of exposure	Species	Environment
LC_{50}		>100 mg/l	96 hour	Fishes (Oncorhynchus mykiss)	
EC_{50}	OECD 202	nestanoveno mg/l		Daphnia (Daphnia magna)	

They are not available

12.2. Persistence and degradability

Biodegradability

2-[2-(2-Butoxyethoxy)ethoxy]ethanol

Parameter	Method	Value	Time of exposure	Environment	Result
	OECD 301D	85 %	28 day		

The product is quickly biodegradable - 100% during 21 days. (OECD 302B).

12.3. Bioaccumulative potential

Insignificant.

12.4. Mobility in soil

The product is soluble and mobile in water and soil. 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

Water hazard class: WGK 1

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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 an authorised person for waste removal (specialized company) authorised 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. Hazard of environmental contamination; remove waste in accordance with local and/or national regulations.

Legislation of waste

Council Directive 75/442/EEC on waste, as last amended. Council Directive 91/689/EEC on hazardous waste, as last amended. Decision 94/3/EC establishing a list of wastes, as last amended.

Code of type of waste

16 01 13 brake fluids

Code of type of waste packaging

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 dangerous goods

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

The product was not prepared a chemical safety report.

SECTION 16: Other information

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

H302	Harmful if swallowed.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

Guidelines for safe handling used in the safety data sheet

P102	Keep out of reach of children.
P280	Wear protective gloves/protective clothing/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.
P501	Dispose of contents/container to in accordance with local regulations.

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

EUH 210	Safety data sheet available on request.

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 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 (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 Kow	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

Acute Tox.	Acute toxicity
Eye Dam.	Serious eye damage
Eye Irrit.	Eye irritation
Repr.	Reproductive toxicity
STOT RE	Specific target organ toxicity - repeated exposure

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

Do not use for purposes other than declared.

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)

1.1. - the concentration of the substances contained and deletion of sentences P 301 + 310

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.