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Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 14.05.2019 / 0009

Replacing version dated / version: 23.03.2018 / 0008

Valid from: 14.05.2019 PDF print date: 14.05.2019 Bremsfluessigkeit DOT 5.1 5 L

Art.: 21163

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

Bremsfluessigkeit DOT 5.1 5 L

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

Hydraulic fluid

Sector of use [SU]:

SU 3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

SU21 - Consumer uses: Private households (=general public = consumers)

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Chemical product category [PC]:

PC16 - Heat transfer fluids

PC17 - Hydraulic fluids

Process category [PROC]:

PROC 1 - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.

PROC 2 - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent

PROC 8a - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC 8b - Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC 9 - Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC20 - Use of functional fluids in small devices

Article Categories [AC]:

AC99 - Not required.

Environmental Release Category [ERC]:

ERC 4 - Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

ERC 7 - Use of functional fluid at industrial site

ERC 9a - Widespread use of functional fluid (indoor)

ERC 9b - Widespread use of functional fluid (outdoor)

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

LIQUI MOLY GmbH, Jerg-Wieland-Str. 4, 89081 Ulm-Lehr, Germany Phone: (+49) 0731-1420-0, Fax: (+49) 0731-1420-88

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets

1.4 Emergency telephone number

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies: +49 (0) 700 / 24 112 112 (LMR)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture



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Classification according to Regulation (EC) 1272/2008 (CLP)

The mixture is not classified as dangerous in the terms of the Regulation (EC) 1272/2008 (CLP).

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)

EUH210-Safety data sheet available on request.

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

SECTION 3: Composition/information on ingredients

Glycol ether Polyglycols Corrosion inhibitor Glycol ether borate

3.1 Substance

n.a. 2 9 Mixture

3.2 Wilkluie	
2-[2-(2-butoxyethoxy)ethoxy]ethanol	
Registration number (REACH)	
Index	603-183-00-0
EINECS, ELINCS, NLP	205-592-6
CAS	143-22-6
content %	1-<5
Classification according to Regulation (EC) 1272/2008 (CLP)	Eve Dam 1 H318

2-(2-methoxyethoxy)ethanol	Substance for which an EU exposure limit value applies.
Registration number (REACH)	
Index	603-107-00-6
EINECS, ELINCS, NLP	203-906-6
CAS	111-77-3
content %	1-<3
Classification according to Regulation (EC) 1272/2008 (CLP)	Repr. 2, H361d

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

Inhalation

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.



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Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion

Rinse the mouth thoroughly with water.

Do not induce vomiting - give copious water to drink. Consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

The following may occur:

Irritation of the eyes

Product removes fat.

Dermatitis (skin inflammation)

In aerosol misting:

Irritation of the respiratory tract

Ingestion of large quantities:

Kidney damage

Coma

Death

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

4.3 Indication of any immediate medical attention and special treatment needed

Indications for the physician:

Symptomatic treatment.

Antidote:

None known

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water jet spray / alcohol resistant foam / CO2 / dry extinguisher.

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Toxic pyrolysis products.

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

Full protection, if necessary.

Cool container at risk with water.

Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure sufficient supply of air.

Avoid contact with eyes or skin.

If applicable, caution - risk of slipping.

6.2 Environmental precautions

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

Prevent from entering drainage system.

Prevent surface and ground-water infiltration, as well as ground penetration.

If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. sand, earth) and dispose of according to Section 13.



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Flush_residue using copious water.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation.

Avoid aerosol formation.

Avoid contact with eyes.

Avoid long lasting or intensive contact with skin.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Protect against moisture and store closed.

Store in a well ventilated place.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

© Chemical Name	2-(2-methoxyethoxy)ethanol		Content %:1-<3
WEL-TWA: 10 ppm (50,1 mg/m3)	(WEL, EU)	WEL-STEL:		
Monitoring procedures:		-		
BMGV:			Other information:	Sk (WEL, EU)

2-[2-(2-butoxyethoxy)eth	_ 					
Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note
	Environmental					
	compartment					
	Environment - freshwater		PNEC	1,5	mg/l	
	Environment - marine		PNEC	0,15	mg/l	
	Environment - sediment,		PNEC	0,13	mg/kg dw	
	marine					
	Environment - sediment,		PNEC	5,77	mg/kg dw	
	freshwater					
	Environment - soil		PNEC	0,45	mg/kg dw	
	Environment - sewage		PNEC	200	mg/l	
	treatment plant					
	Environment - water,		PNEC	5	mg/l	
	sporadic (intermittent)					
	release					
Consumer	Human - dermal	Long term, systemic	DNEL	25	mg/kg	
		effects			bw/day	
Consumer	Human - inhalation	Long term, systemic	DNEL	117	mg/m3	
		effects				



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Consumer	Human - oral	Long term, systemic effects	DNEL	2,5	mg/kg bw/day
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	50	mg/kg bw/day
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	195	mg/m3

Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note
••	Environmental		•			
	compartment					
	Environment - freshwater		PNEC	12	mg/l	
	Environment - marine		PNEC	1,2	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	12	mg/l	
	Environment - sediment, freshwater		PNEC	44,4	mg/kg dw	
	Environment - sediment, marine		PNEC	0,44	mg/l	
	Environment - soil		PNEC	2,44	mg/kg dw	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,27	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	25	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	1,5	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,53	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	50,1	mg/m3	

2-(2-(2-methoxyethoxy)e Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note
Area or application	Environmental compartment	Litest on Health	Descriptor	Value	O III	Note
	Environment - freshwater		PNEC	10	mg/l	
	Environment - marine		PNEC	1	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	50	mg/l	
	Environment - sediment, freshwater		PNEC	36,6	mg/kg dw	
	Environment - marine		PNEC	0,8	mg/kg dw	
	Environment - soil		PNEC	1,73	mg/kg dw	
	Environment - sewage treatment plant		PNEC	200	mg/l	
	Environment - oral (animal feed)		PNEC	89	mg/kg feed	
Consumer	Human - dermal	Long term, systemic effects	DNEL	20	mg/kg bw/d	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	93	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	2	mg/kg bw/d	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	40	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	156	mg/m3	



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"Arbeitsplatzgrenzwert" (workplace limit value, Germany).

(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).

(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.

These are specified by e.g. BS EN 14042.

BS EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

Tight fitting protective goggles (EN 166) with side protection, with danger of splashes.

Skin protection - Hand protection:

Recommended

Safety gloves made of natural rubber latex (EN 374).

Safety gloves made of PE laminate (EN 374).

Protective PVC gloves (EN 374)

Protective nitrile gloves (EN 374).

Minimum layer thickness in mm:

>= 0,4

Permeation time (penetration time) in minutes:

>= 480

The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.

The recommended maximum wearing time is 50% of breakthrough time.

Protective hand cream recommended.

Skin protection - Other:

Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:

Normally not necessary.

If fumes build up, use suitable breathing mask.

Filter A2 P2 (EN 14387), code colour brown, white

Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:

Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.



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The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:

Colour:

Colour:

Colour:

Colour:

Odour:

Mild

Odour threshold:

Ph-value:

Mot determined

7-10,5 (SAE J 1703)

Melting point/freezing point:

Not determined

Initial boiling point and boiling range: >260 °C

Flash point: >100 °C (IP 35 (Pensky-Martens, open cup))

Evaporation rate:

Flammability (solid, gas):

Lower explosive limit:

Upper explosive limit:

Vapour pressure:

Not determined

Not determined

Not determined

Vapour pressure:

<2 mbar (20°C)

Vapour density (air = 1):Vapours heavier than air.Density:1,04-1,09 g/ml (20°C)Bulk density:Not determinedSolubility(ies):Not determined

Water solubility: Mixable

Partition coefficient (n-octanol/water): <2 (OECD 117 (Partition Coefficient (n-octanol/water) - HPLC

method))

Auto-ignition temperature: >300 °C (ASTM D 286)

Decomposition temperature: Not determined

Viscosity: ~5-10 cSt (20°C, ASTM D 445)

Explosive properties: Not determined Oxidising properties: Not determined

9.2 Other information

Miscibility:

Fat solubility / solvent:

Conductivity:

Not determined

Not determined

Not determined

Not determined

Surface tension:

Not determined

Not determined

Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No decomposition if used as intended.

10.4 Conditions to avoid

See also section 7.

Strong heat

Protect from humidity.

Product is hygroscopic.

10.5 Incompatible materials

See also section 7.

Avoid contact with strong oxidizing agents.

Carefully avoid contamination of the product with foreign substances.

10.6 Hazardous decomposition products



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See also section 5.2

No decomposition when used as directed.

Peroxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Possibly more information on health effects, see Section 2.1 (classification).

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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	> 5000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	> 2000	mg/kg	Rat		
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:					OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:					OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin					,	n.d.a.
sensitisation:						
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.
Other information:						Classification
						according to
						calculation
						procedure.

2-[2-(2-butoxyethoxy)ethoxy]ethanol									
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes			
Acute toxicity, by oral route:	LD50	5100-6616	mg/kg	Rat					
Acute toxicity, by dermal route:	LD50	>2000-6540	mg/kg	Rabbit					
Germ cell mutagenicity:					OECD 471 (Bacterial	Negative			
					Reverse Mutation Test)				
Symptoms:						cornea opacity,			
						mucous			
						membrane			
						irritation			

2-(2-methoxyethoxy)ethanol									
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes			
Acute toxicity, by oral route:	LD50	9210	mg/kg	Rat					
Acute toxicity, by dermal route:	LD50	6500	mg/kg	Rabbit					



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Symptoms:		breathing
		difficulties,
		respiratory
		distress,
		heart/circulatory
		disorders,
		coughing,
		headaches,
		gastrointestinal
		disturbances,
		mucous
		membrane
		irritation,
		dizziness,
		nausea

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

Bremsfluessigkeit DOT	5.1 5 L						
Art.: 21163 Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	> 100	mg/l	Oncorhynchus mykiss		1.0.00
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and degradability:							n.d.a.
12.3. Bioaccumulative potential:							Not accepted owing to the logP values of the components.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Other adverse effects:							n.d.a.

2-[2-(2-butoxyethoxy)ethoxy]ethanol									
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes		
12.1. Toxicity to fish:	LC50	96h	1305- 4600	mg/l	Leuciscus idus				
12.1. Toxicity to fish:	LC50	96h	1350- 2400	mg/l	Pimephales promelas				
12.1. Toxicity to daphnia:	EC50	48h	500- 2802	mg/l	Daphnia magna				
12.1. Toxicity to algae:	EC50	72h	>500	mg/l	Scenedesmus subspicatus				
12.2. Persistence and degradability:		14d	88	%		OECD 301 E (Ready Biodegradability - Modified OECD Screening Test)			

2-(2-methoxyethoxy)ethanol											
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes				
12.1. Toxicity to fish:	LC50	24h	>5000	mg/l	Leuciscus idus						
12.1. Toxicity to algae:	EC50	72h	>500	mg/l	Scenedesmus subspicatus						

SECTION 13: Disposal considerations



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13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no .:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be

allocated under certain circumstances. (2014/955/EU)

16 01 13 brake fluids

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

E.g. dispose at suitable refuse site.

E.g. suitable incineration plant.

For contaminated packing material

Pay attention to local and national official regulations.

Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

SECTION 14: Transport information

n.a.

n.a.

General statements

14.1. UN number: n.a.

Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name: 14.3. Transport hazard class(es): 14.4. Packing group: Classification code:

n.a. n.a. Not applicable

14.5. Environmental hazards: Tunnel restriction code:

Transport by sea (IMDG-code)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a. 14.4. Packing group: n.a. Marine Pollutant: n.a

14.5. Environmental hazards: Not applicable

Transport by air (IATA)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a. 14.4. Packing group: n.a.

14.5. Environmental hazards: Not applicable

14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

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

Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

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

Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)! Regulation (EC) No 1907/2006, Annex XVII

2-(2-methoxyethoxy)ethanol

General hygiene measures for the handling of chemicals are applicable.



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Directive 2010/75/EU (VOC):

0 g/l

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections:

3

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Not applicable

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H361d Suspected of damaging the unborn child.

H318 Causes serious eye damage.

Eye Dam. — Serious eye damage Repr. — Reproductive toxicity

Any abbreviations and acronyms used in this document:

AC Article Categories

acc., acc. to according, according to

ACGIH American Conference of Governmental Industrial Hygienists

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)

AOEL Acceptable Operator Exposure Level
AOX Adsorbable organic halogen compounds

approx. approximately

Art., Art. no. Article number

ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)

BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)
BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BCF Bioconcentration factor

BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)

BHT Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol) BMGV Biological monitoring guidance value (EH40, UK)

BOD Biochemical oxygen demand

BSEF Bromine Science and Environmental Forum

bw body weight

CAS Chemical Abstracts Service

CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids

CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques

CIPAC Collaborative International Pesticides Analytical Council

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)

CMR carcinogenic, mutagenic, reproductive toxic

COD Chemical oxygen demand

CTFA Cosmetic, Toiletry, and Fragrance Association

DMEL Derived Minimum Effect Level DNEL Derived No Effect Level

DOC Dissolved organic carbon

DT50 Dwell Time - 50% reduction of start concentration

DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)

dw dry weight

e.g. for example (abbreviation of Latin 'exempli gratia'), for instance

EC European Community
ECHA European Chemicals Agency



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European Economic Area EEA **EEC** European Economic Community

FINECS European Inventory of Existing Commercial Chemical Substances

ELINCS European List of Notified Chemical Substances

European Norms ΕN

United States Environmental Protection Agency (United States of America) EPA

Environmental Release Categories ERC

Exposure scenario FS

etc. et cetera European Union EU

EWC European Waste Catalogue

Fax. Fax number gen. general

Globally Harmonized System of Classification and Labelling of Chemicals GHS

GWP Global warming potential

Hen's Egg Test - Chorionallantoic Membrane HET-CAM

HGWP Halocarbon Global Warming Potential IARC International Agency for Research on Cancer International Air Transport Association IATA

Intermediate Bulk Container **IBC**

International Bulk Chemical (Code) IBC (Code)

IC Inhibitory concentration

International Maritime Code for Dangerous Goods IMDG-code incl.

including, inclusive

IUCLID International Uniform ChemicaL Information Database

LC lethal concentration

LC50 lethal concentration 50 percent kill LCLo lowest published lethal concentration

LD Lethal Dose of a chemical LD50 Lethal Dose, 50% kill LDLo Lethal Dose Low

LOAEL Lowest Observed Adverse Effect Level LOEC Lowest Observed Effect Concentration LOEL Lowest Observed Effect Level

Limited Quantities LQ

MARPOL International Convention for the Prevention of Marine Pollution from Ships

not applicable n.a. not available n.av. not checked n.c. n.d.a. no data available

NIOSH National Institute of Occupational Safety and Health (United States of America)

NOAECNo Observed Adverse Effective Concentration

NOAEL No Observed Adverse Effect Level NOEC No Observed Effect Concentration NOEL No Observed Effect Level Ozone Depletion Potential ODP

OECD Organisation for Economic Co-operation and Development

organic org.

polycyclic aromatic hydrocarbon PĂH PBT persistent, bioaccumulative and toxic PC Chemical product category

Polyethylene PF

PNEC Predicted No Effect Concentration POCP Photochemical ozone creation potential

ppm parts per million PROC Process category PTFE Polytetrafluorethylene

REACHRegistration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)

9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List REACH-IT List-No. Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.

Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International RID Carriage of Dangerous Goods by Rail)



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Art.: 21163

SADT Self-Accelerating Decomposition Temperature

SAR Structure Activity Relationship

SU Sector of use

SVHC Substances of Very High Concern

Tel. Telephone

ThOD Theoretical oxygen demand TOC Total organic carbon

TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances) **UN RTDG** United Nations Recommendations on the Transport of Dangerous Goods VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).

WHO World Health Organization

wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.

These statements were made by: Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

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