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

Revision date / version: 01.11.2021 / 0014

Replacing version dated / version: 18.10.2021 / 0013

Valid from: 01.11.2021 PDF print date: 01.11.2021 Formula Super 20W-50

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

1.1 Product identifier

Formula Super 20W-50

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

Motor oil

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 Tel.: (+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)

+1 872 5888271 (LMR)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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 %).

The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).



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SECTION 3: Composition/information on ingredients

3.1 Substances

n.a. 3.2 Mixtures

Distillates (petroleum), hydrotreated light paraffinic	
Registration number (REACH)	01-2119487077-29-XXXX
Index	649-468-00-3
EINECS, ELINCS, NLP, REACH-IT List-No.	265-158-7
CAS	64742-55-8
content %	1-<5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Asp. Tox. 1, H304

Distillates (petroleum), solvent-dewaxed heavy paraffinic	
Registration number (REACH)	01-2119471299-27-XXXX
Index	649-474-00-6
EINECS, ELINCS, NLP, REACH-IT List-No.	265-169-7
CAS	64742-65-0
content %	1-<5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Asp. Tox. 1, H304

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.

Skin contact

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

Eye contact

Remove contact lenses.

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

Keep Data Sheet available.

Ingestion

Rinse the mouth thoroughly with water.

Do not induce vomiting. Consult doctor immediately.

Danger of aspiration.

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. 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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media

CO₂

Foam



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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

Oxides of nitrogen

Oxides of sulphur

Flammable vapour/air mixtures

5.3 Advice for firefighters

For personal protective equipment see Section 8.

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

Protective respirator with independent air supply.

According to size of fire

Full protection, if necessary.

Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination.

Ensure sufficient ventilation, remove sources of ignition.

Avoid dust formation with solid or powder products.

Leave the danger zone if possible, use existing emergency plans if necessary.

Avoid contact with eyes or skin.

If applicable, caution - risk of slipping.

6.1.2 For emergency responders

See section 8 for suitable protective equipment and material specifications.

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. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.

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

Avoid formation of oil mist.

Ensure good ventilation.

Avoid contact with eyes.

Avoid long lasting or intensive contact with skin.

Do not carry cleaning cloths soaked in product in trouser pockets.

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.



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Store product closed and only in original packing. Protect against moisture and store closed.

Impermeable floor.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Chemical Name Oil mist, mir	neral	Content %:
WEL-TWA: 5 mg/m3 (Mineral oil, excluding meta	al WEL-STEL:	
working fluids, ACGIH)		
Monitoring procedures:	- Draeger - Oil Mist 1/a (67 33 031)	
BMGV:	Other information:	

Distillates (petroleum), hydrotreated light paraffinic										
Area of application	Exposure route / Effect on health Descriptor Value Unit Note									
	Environmental		-							
	compartment									
	Environment - oral (animal feed)		PNEC	9,33	mg/kg feed					
Consumer	Human - inhalation	Long term, local effects	DNEL	1,19	mg/m3					
Consumer	Human - oral	Long term, systemic effects	DNEL	0,74	mg/kg bw/day					
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,97	mg/kg bw/day					
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	2,7	mg/m3					

Distillates (petroleum), solvent-dewaxed heavy paraffinic												
Area of application	Exposure route / Effect on health Descriptor Value Unit Note											
	Environmental											
	compartment											
	Environment - oral (animal		PNEC	9,33	mg/kg feed							
	feed)											
Consumer	Human - inhalation	Long term, local effects	DNEL	1,2	mg/m3							
Workers / employees	Human - inhalation	Long term, local effects	DNEL	5,4	mg/m3							

Distillates (petroleum), hydrotreated heavy paraffinic											
Area of application	Exposure route /	Exposure route / Effect on health Descriptor Value Unit Note									
	Environmental										
	compartment										
	Environment - oral (animal		PNEC	9,33	mg/kg feed						
	feed)										

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).

^{(8) =} Inhalable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | 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.

^{(13) =} The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).



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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. EN 14042.

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:

Protective nitrile gloves (EN ISO 374).

Minimum layer thickness in mm:

0,4

Permeation time (penetration time) in minutes:

> 480

Protective hand cream recommended.

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.

Skin protection - Other:

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

Respiratory protection:

If OES or MEL is exceeded.

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.

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:

Odour:

Liquid

Light brown

Characteristic

Melting point/freezing point:

There is no information available on this parameter.

Boiling point or initial boiling point and boiling range:

There is no information available on this parameter.



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Flammability:

Lower explosion limit: Upper explosion limit:

Flash point:

Auto-ignition temperature: Decomposition temperature:

pH:

Kinematic viscosity: Kinematic viscosity:

Solubility:

Partition coefficient n-octanol/water (log value):

Vapour pressure:

Density and/or relative density: Relative vapour density:

Particle characteristics:

9.2 Other information

No information available at present.

Combustible.

There is no information available on this parameter. There is no information available on this parameter. There is no information available on this parameter. There is no information available on this parameter.

There is no information available on this parameter.

Mixture is non-soluble (in water).

165,0 mm2/s (40°C) 18,5 mm2/s (100°C)

Insoluble

Does not apply to mixtures.

There is no information available on this parameter.

0,880 g/cm3

There is no information available on this parameter.

Does not apply to liquids.

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 dangerous reactions are known.

10.4 Conditions to avoid

See also section 7.

Open flame, ignition sources

10.5 Incompatible materials

See also section 7.

Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

Formula Super 20W-50						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
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 -						n.d.a.
single exposure (STOT-SE):						
Specific target organ toxicity -						n.d.a.
repeated exposure (STOT-RE):						
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

Distillates (petroleum), hydrotreated light paraffinic



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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral	Analogous
					Toxicity)	conclusion
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit	OECD 402 (Acute	Analogous
					Dermal Toxicity)	conclusion
Acute toxicity, by inhalation:	LC50	>5,53	mg/l/4h	Rat	OECD 403 (Acute	Aerosol,
					Inhalation Toxicity)	Analogous
						conclusion
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Not irritant,
					Dermal	Analogous
					Irritation/Corrosion)	conclusion
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye	Not irritant,
-					Irritation/Corrosion)	Analogous
					,	conclusion
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin
sensitisation:					Sensitisation)	contact),
					,	Analogous
						conclusion
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative,
,-				typhimurium	Reverse Mutation Test)	Analogous
				1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	Tronge managem root,	conclusion
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro	Negative,
John John Malagomony.				· · · · · · · · · · · · · · · · · · ·	Mammalian	Analogous
					Chromosome	conclusionChines
					Aberration Test)	e hamster
Carcinogenicity:				Mouse	OECD 451	Negative,
Carolingerholty.				Wiodsc	(Carcinogenicity Studies)	Analogous
					(Carcinogenicity Studies)	conclusiondermal
Reproductive toxicity:	NOAEL	1000	mg/kg	Rat	OECD 421	Analogous
reproductive toxicity.	NOALL	1000	bw/d	IXAL	(Reproduction/Developm	conclusiondermal
			DW/G		ental Toxicity Screening	Conclusionacimal
					Test)	
Reproductive toxicity				Rat	OECD 414 (Prenatal	Negative,
(Developmental toxicity):				IXAL	Developmental Toxicity	Analogous
(Developmental toxicity).					Study)	conclusion
Aspiration hazard:					Study)	Yes
Specific target organ toxicity -	NOAEL	125	mg/kg	Rat	OECD 408 (Repeated	Analogous
repeated exposure (STOT-RE),	NOALL	123	bw/d	INal	Dose 90-Day Oral	conclusion
oral:			DW/G		Toxicity Study in	COHOIUSION
orai.					Rodents)	
Specific target organ toxicity -	NOAEL	<30	mg/kg	Rat	OECD 411 (Subchronic	Analogous
repeated exposure (STOT-RE),	NOAEL	<30	bw/d	Nai	Dermal Toxicity - 90-day	conclusion
dermal:			bw/u			CONCIUSION
Specific target organ toxicity -	NOAEL	1000	ma/ka	Dobbit	Study) OECD 410 (Repeated	Analogous
repeated exposure (STOT-RE),	NOAEL	1000	mg/kg	Rabbit	Dose Dermal Toxicity -	Analogous conclusion
dermal:					90-Day)	CONCIUSION
	NOAEL	0.05		Dot		Agragal
Specific target organ toxicity -	NOAEL	0,05	mg/l	Rat	OECD 412 (Subacute	Aerosol,
repeated exposure (STOT-RE),					Inhalation Toxicity - 28-	Analogous
inhalat.:	NOAT	0.45	"	D-4	Day Study)	conclusion
Specific target organ toxicity -	NOAEL	0,15	mg/l	Rat		Aerosol,
repeated exposure (STOT-RE),						Analogous
inhalat.:						conclusion13
						weeks

Distillates (petroleum), solvent-dewaxed heavy paraffinic									
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes			
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)				
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)				
Acute toxicity, by inhalation:	LD50	>5,53	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Aerosol			



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Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal	Not irritant, Analogous
					Irritation/Corrosion)	conclusion
Sorious ava damaga/irritation:				Rabbit	OECD 405 (Acute Eye	Not irritant,
Serious eye damage/irritation:				Rabbit		
					Irritation/Corrosion)	Analogous
				<u> </u>		conclusion
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin
sensitisation:					Sensitisation)	contact),
						Analogous
						conclusion
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian	Negative,
5 ,					Erythrocyte `	Analogous
					Micronucleus Test)	conclusion
Germ cell mutagenicity:					OECD 473 (In Vitro	Negative,
Cerm cen matagemony.					Mammalian	Analogous
					Chromosome	conclusion
				0.1	Aberration Test)	Chinese hamste
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative,
				typhimurium	Reverse Mutation Test)	Analogous
						conclusion
Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro	Negative,
					Mammalian Cell Gene	Analogous
					Mutation Test)	conclusion
Carcinogenicity:				Mouse	,	Female, Negativ
Carcinogenicity:				Mouse	OECD 451	Negative,
Caroniogornoxy.				Modeo	(Carcinogenicity Studies)	Analogous
					(Carcinogenicity Studies)	conclusion 78
						weeks, dermal
Demandrative toxicity				Det		
Reproductive toxicity:				Rat	0505 444 (5	Negative
Reproductive toxicity				Rat	OECD 414 (Prenatal	Negative,
(Developmental toxicity):					Developmental Toxicity	Analogous
					Study)	conclusion
						dermal
Reproductive toxicity (Effects				Rat	OECD 421	Negative,
on fertility):					(Reproduction/Developm	Analogous
					ental Toxicity Screening	conclusion oral,
					Test)	dermal
Aspiration hazard:					1334	Yes
Symptoms:						mucous
Cymptomo.						membrane
						irritation,
						dizziness,
						nausea
Specific target organ toxicity -	NOAEL	~1000	mg/kg	Rabbit	OECD 410 (Repeated	Analogous
repeated exposure (STOT-RE),			bw/d		Dose Dermal Toxicity -	conclusion
dermal:					90-Day)	
Specific target organ toxicity -	NOAEL	30	mg/kg/d	Rat	OECD 411 (Subchronic	Analogous
repeated exposure (STOT-RE),					Dermal Toxicity - 90-day	conclusion
					Study)	
dermal:	1	0,22	mg/l	Rat		Aerosol,
dermal: Specific target organ toxicity -	NOAFI		19/1	1 1 1 1 1		
Specific target organ toxicity -	NOAEL	0,22				Analogotie
Specific target organ toxicity - repeated exposure (STOT-RE),	NOAEL	0,22				Analogous
Specific target organ toxicity -	NOAEL	0,22				conclusion 4
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:				Det		conclusion 4 weeks
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: Specific target organ toxicity -	NOAEL	0,15	mg/l	Rat		conclusion 4 weeks Aerosol,
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: Specific target organ toxicity - repeated exposure (STOT-RE),				Rat		conclusion 4 weeks Aerosol, Analogous
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: Specific target organ toxicity -				Rat		conclusion 4 weeks Aerosol,

11.2. Information on other hazards

Formula Super 20W-50									
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes			
Endocrine disrupting properties:						Does not apply to mixtures.			
		•	•		•				



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Other information:			No other
			relevant
			information
			available on
			adverse effects
			on health.

SECTION 12: Ecological information

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

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	•						n.d.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and							Isolate as much
degradability:							as possible with
							an oil separator.
12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT							n.d.a.
and vPvB assessment							
12.6. Endocrine							Does not apply
disrupting properties:							to mixtures.
12.7. Other adverse							No information
effects:							available on
							other adverse
							effects on the
							environment.
Other information:							DOC-elimination
							degree(complexi
							ng organic
							substance)>=
							80%/28d: n.a.
Other information:	AOX			%			According to the
							recipe, contains
							no AOX.

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	NOEC/NOEL	28d	>1000	mg/l	Oncorhynchus mykiss	QSAR	
12.1. Toxicity to fish:	LL50	96h	>100	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	Analogous conclusion
12.1. Toxicity to fish:	NOEC/NOEL	14d	1000	mg/l	Oncorhynchus mykiss	QSAR	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	10	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	Analogous conclusion
12.3. Bioaccumulative potential:							Not to be expected
12.1. Toxicity to daphnia:	EL50	48h	> 10000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	Analogous conclusion
12.1. Toxicity to algae:	NOEC/NOEL	72h	>=100	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	Analogous conclusion



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12.1. Toxicity to algae:	EC50	72h	>100	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition	Analogous conclusion
					·	Test)	
12.2. Persistence and		28d	31	%	activated sludge	OECD 301 F	Not readily
degradability:						(Ready	biodegradable,
						Biodegradability -	Analogous
						Manometric	conclusion
						Respirometry Test)	
12.3. Bioaccumulative potential:	Log Pow		>6				@20°C
12.5. Results of PBT							No PBT
and vPvB assessment							substance, No
							vPvB substance

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
12.1. Toxicity to fish:	LC50	96h	>100	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	Analogous conclusion
12.1. Toxicity to fish:	NOEC/NOEL	14d	1000	mg/l	Oncorhynchus mykiss	QSAR	
12.1. Toxicity to fish:	LC50	96h	>1000	mg/l	Salmo gairdneri		
12.1. Toxicity to fish:	LC50	96h	>5000	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	>1000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	Analogous conclusion
12.1. Toxicity to algae:	EC50	96h	>1000	mg/l	Scenedesmus subspicatus		
12.2. Persistence and degradability:		28d	6	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Analogous conclusion
12.2. Persistence and degradability:		28d	31	%	activated sludge	OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Not readily biodegradable (Analogous conclusion)
12.3. Bioaccumulative potential:	Log Pow		>3				Low
Toxicity to bacteria:	EC20	6h	>1000	mg/l	Pseudomonas fluorescens		

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

Soaked polluted cloths, paper or other organic materials represent a fire hazard and should be controlled, collected and disposed of. 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)

13 02 05 mineral-based non-chlorinated engine, gear and lubricating oils

Recommendation:

Sewage disposal shall be discouraged.



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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.

15 01 01 paper and cardboard packaging

15 01 02 plastic packaging

15 01 04 metallic packaging

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

General statements

14.1. UN number or ID number: n.a.

Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name:

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

14.5. Environmental hazards: Not applicable

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):

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. Maritime transport in bulk according to IMO instruments

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

Observe restrictions:

General hygiene measures for the handling of chemicals are applicable.

Directive 2010/75/EU (VOC): 1 %

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections: 1-16

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

Not applicable



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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).

H304 May be fatal if swallowed and enters airways.

Asp. Tox. — Aspiration hazard

Key literature references and sources for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.

Guidelines for the preparation of safety data sheets as amended (ECHA).

Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).

Safety data sheets for the constituent substances.

ECHA Homepage - Information about chemicals.

GESTIS Substance Database (Germany).

German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).

EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.

National Lists of Occupational Exposure Limits for each country as amended.

Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

Any abbreviations and acronyms used in this document:

acc., acc. to according, according to

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the

International Carriage of Dangerous Goods by Road)

AOX Adsorbable organic halogen compounds

approx. approximately

Art., Art. no. Article number

ASTM ASTM International (American Society for Testing and Materials)

ATE Acute Toxicity Estimate

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

BSEF The International Bromine Council

bw body weight

CAS Chemical Abstracts Service

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

and mixtures)

CMR carcinogenic, mutagenic, reproductive toxic

DMEL Derived Minimum Effect Level
DNEL Derived No Effect Level
DOC Dissolved organic carbon

dw dry weight

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

EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants)

EC European Community

ECHA European Chemicals Agency

ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect

EEC European Economic Community

EINECS European Inventory of Existing Commercial Chemical Substances

ELINCS European List of Notified Chemical Substances

EN European Norms

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

ErCx, EμCx, ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)

etc. et cetera

EU European Union

EVAL Ethylene-vinyl alcohol copolymer

Fax. Fax number gen. general

GHS Globally Harmonized System of Classification and Labelling of Chemicals

GWP Global warming potential



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Koc Adsorption coefficient of organic carbon in the soil

octanol-water partition coefficient Kow

IARC International Agency for Research on Cancer IATA International Air Transport Association IBC (Code) International Bulk Chemical (Code)

International Maritime Code for Dangerous Goods IMDG-code

including, inclusive

IUCLID International Uniform Chemical Information Database IUPAC International Union for Pure Applied Chemistry LC50 Lethal Concentration to 50 % of a test population

LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)

Log Koc Logarithm of adsorption coefficient of organic carbon in the soil Log Kow, Log Pow Logarithm of octanol-water partition coefficient

Limited Quantities LQ

MARPOL International Convention for the Prevention of Marine Pollution from Ships

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

NIOSH National Institute for Occupational Safety and Health (USA)

NLP No-longer-Polymer

NOEC, NOEL No Observed Effect Concentration/Level

OECD Organisation for Economic Co-operation and Development

organic

OSHA Occupational Safety and Health Administration (USA)

PBT persistent, bioaccumulative and toxic

PΕ Polyethylene

PNEC Predicted No Effect Concentration

ppm parts per million

PVC Polyvinylchloride

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

Evaluation, Authorisation and Restriction of Chemicals)

REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List

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 Carriage of Dangerous Goods by Rail)

SVHC Substances of Very High Concern

Telephone Tel.

TOC Total organic carbon

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

Volatile organic compounds VOC

vPvB very persistent and very bioaccumulative

wet weight wwt

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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