

(GB) Page 1 of 21 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0020 Replacing version dated / version: 18.07.2019 / 0019 Valid from: 01.11.2021 PDF print date: 01.11.2021 **Bio Diesel Additiv**

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

Bio Diesel Additiv

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

Additives 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) Hazard class Hazard category Hazard statement Asp. Tox. 1 3

Aquatic Chronic

H304-May be fatal if swallowed and enters airways. H412-Harmful to aquatic life with long lasting effects.

2.2 Label elements Labeling according to Regulation (EC) 1272/2008 (CLP)





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H304-May be fatal if swallowed and enters airways. H412-Harmful to aquatic life with long lasting effects.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children. P301+P310-IF SWALLOWED: Immediately call a POISON CENTER / doctor. P331-Do NOT induce vomiting. P405-Store locked up. P501-Dispose of contents / container to an approved waste disposal facility.

EUH044-Risk of explosion if heated under confinement. EUH066-Repeated exposure may cause skin dryness or cracking.

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

2.3 Other hazards

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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 %). Dangerous vapours heavier than air.

SECTION 3: Composition/information on ingredients

3.1 Substances

n.a. 3.2 Mixtures

3.2 Mixtures	
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	
Registration number (REACH)	01-2119457273-39-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	918-481-9
CAS	
content %	60-80
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	EUH066
	Asp. Tox. 1, H304
2-Ethylhexylnitrate	
Registration number (REACH)	01-2119539586-27-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	248-363-6
CAS	27247-96-7
content %	5-15
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	EUH066
	Acute Tox. 4, H302
	Acute Tox. 4, H312
	Acute Tox. 4, H332
	Aquatic Chronic 2, H411
Distillates (petroleum), hydrotreated heavy paraffinic	
Registration number (REACH)	01-2119484627-25-XXXX
Index	649-467-00-8
EINECS, ELINCS, NLP, REACH-IT List-No.	265-157-1
CAS	64742-54-7
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Asp. Tox. 1, H304
Reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-	
hydroxyphenyl)propionate	
Registration number (REACH)	01-0000015551-76-XXXX
Index	607-530-00-7
EINECS, ELINCS, NLP, REACH-IT List-No.	406-040-9



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CAS	125643-61-0
content %	1-5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Aquatic Chronic 4, H413
2-Ethylhexanol	Substance for which an EU exposure limit value applies.
Registration number (REACH)	01-2119487289-20-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	203-234-3
CAS	104-76-7
content %	1-5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 4, H332
	Skin Irrit. 2, H315
	Eye Irrit. 2, H319
	STOT SE 3, H335

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.

If, for example, the note P is applied for a hydrocarbon then this has already been taken into account for the classification named here.

Quote: "Note P - The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7)."

Article 4 of the regulation (EC) no. 1272/2008 (CLP regulation) was also observed and taken into account for the classification named here.

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.

Ingestion

Rinse the mouth thoroughly with water.

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

Danger of aspiration.

In case of vomiting, keep head low so that the stomach content does not reach the lungs.

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)

Ingestion: Oedema of the lungs Lung damage

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

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SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media



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Extinction powder Foam Cool container at risk with water.

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 Hydrocarbons Toxic pyrolysis products. Explosive vapour/air or gas/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. 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

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.

Remove possible causes of ignition - do not smoke.

Ensure sufficient supply of air.

Avoid inhalation, and 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

Ensure good ventilation.

Keep away from sources of ignition - Do not smoke. Avoid contact with eyes or skin.

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

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

7.1.2 Notes on general hygiene measures at the workplace



Content %:60-80

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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

Keep out of access to unauthorised individuals. Store product closed and only in original packing. Not to be stored in gangways or stair wells. Solvent resistant floor Do not store with oxidizing agents. Store in a well ventilated place. Protect from direct sunlight and warming. Store cool.

7.3 Specific end use(s)

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No information available at present.

SECTION 8: Exposure controls/personal protection

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

8.1 Control parameters

Chemical Name

Workplace exposure limit (WEL) of the total hydrocarbon solvent content of the mixture (RCP method according to EH40): 800 mg/m3

WEL-TWA: 800 mg/m3		WEL-STEL:				
Monitoring procedures:		aeger - Hydrocarbons 0,1%/c	· /			
		aeger - Hydrocarbons 2/a (81	03 581)			
	- Coi	mpur - KITA-187 S (551 174)				
BMGV:				(EL acc. to RC	P-method,
			paragraphs	84-87, EH4	10)	
Chemical Name	2-Ethylhexanol				С	ontent %:1-5
WEL-TWA: 1 ppm (5,4 mg/m	13) (WEL, EU)	WEL-STEL:				
Monitoring procedures:		aeger - Alcohol 100/a (CH 29	701)			
BMGV:		x ,	Other infor	mation:		
Chemical Name	Hydrocarbons, C10-C	C13, n-alkanes, isoalkanes, cy	clics. <2% aror	natics		Content %:
WEL-TWA: 800 mg/m3		WEL-STEL:				
Monitoring procedures:	- Dra	aeger - Hydrocarbons 0,1%/c	(81 03 571)			
		aeger - Hydrocarbons 2/a (81	03 581)			
	- Coi	mpur - KITA-187 S (551 174)				
BMGV:				```	EL acc. to RC	P-method,
			paragraphs	84-87, EH4	40)	
Chemical Name	Oil mist, mineral					Content %:
WEL-TWA: 5 mg/m3 (Minera	al oil, excluding metal	WEL-STEL:				
working fluids, ACGIH)						
Monitoring procedures:	- Dra	aeger - Oil Mist 1/a (67 33 031				
BMGV:			Other inform	mation:		
2-Ethylhexylnitrate						
Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note
	Environmental					
	compartment					
	Environment - freshwater		PNEC	0,8	µg/l	
	Environment - marine		PNEC	0,08	µg/l	
	Environment - sediment		PNEC	0,00074	mg/kg dw	
	Environment - soil		PNEC	0,00019 1	mg/kg dw	
Consumer	Human - dermal	Long term, systemic	DNEL	0,52	mg/kg	
		effects			bw/day	
L	-	1				1



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Consumer	Human - inhalation	Long term, systemic	DNEL	0,087	mg/m3	
-		effects				
Consumer	Human - oral	Long term, systemic	DNEL	0,025	mg/kg	
		effects			bw/day	
Consumer	Human - dermal	Long term, local effects	DNEL	0,022	mg/cm2	
Workers / employees	Human - dermal	Long term, systemic	DNEL	1	mg/kg	
		effects			bw/day	
Workers / employees	Human - inhalation	Long term, systemic	DNEL	0,35	mg/m3	
		effects			-	
Workers / employees	Human - dermal	Long term, local effects	DNEL	0,044	mg/cm2	

Distillates (petroleum), hydrotreated 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		

Area of application	Exposure route / Environmental	Effect on health	Descriptor	Value	Unit	Note
	compartment					
	Environment - sewage		PNEC	10	mg/l	
	treatment plant					
	Environment - sediment,		PNEC	0,37	mg/kg	
	freshwater					
	Environment - sediment,		PNEC	0,037	mg/kg	
	marine					
	Environment - soil		PNEC	189	mg/kg	
	Environment - freshwater		PNEC	0,0043	mg/kg	
	Environment - marine		PNEC	0,00043	mg/kg	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,74	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	4,3	mg/kg	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,43	mg/kg	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,22	mg/kg	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	3	mg/m3	
Workers / employees	Human - dermal	Short term, local effects	DNEL	1	mg/cm2	
Workers / employees	Human - dermal	Long term, local effects	DNEL	0,006	mg/cm2	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	20	mg/kg	

2-Ethylhexanol						
Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note
	Environmental					
	compartment					
	Environment - freshwater		PNEC	0,017	mg/l	
	Environment - marine		PNEC	0,0017	mg/l	
	Environment - sporadic		PNEC	0,17	mg/l	
	(intermittent) release				-	
	Environment - sewage		PNEC	10	mg/l	
	treatment plant				-	
	Environment - sediment,		PNEC	0,28	mg/kg dw	
	freshwater					



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	Environment - sediment, marine		PNEC	0,028	mg/kg dw
	Environment - soil		PNEC	0,047	mg/kg dw
	Environment - oral (animal feed)		PNEC	55	mg/kg feed
Consumer	Human - oral	Long term, systemic effects	DNEL	1,1	mg/kg body weight/day
Consumer	Human - inhalation	Short term, local effects	DNEL	53,2	mg/m3
Consumer	Human - dermal	Long term, systemic effects	DNEL	11,4	mg/kg bw/day
Consumer	Human - inhalation	Long term, systemic effects	DNEL	2,3	mg/m3
Consumer	Human - oral	Short term, systemic effects	DNEL	1,1	mg/kg bw/day
Consumer	Human - inhalation	Long term, local effects	DNEL	26,6	mg/m3
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	12,8	mg/m3
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	23	mg/kg bw/day
Workers / employees	Human - inhalation	Short term, local effects	DNEL	53,2	mg/m3
Workers / employees	Human - inhalation	Long term, local effects	DNEL	53,2	mg/m3
Workers / employees	Human - oral	Long term, systemic effects	DNEL	12,8	mg/m3

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).

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 with side protection (EN 166).

Skin protection - Hand protection: Solvent resistant protective gloves (EN ISO 374).



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If applicable

Protective nitrile gloves (EN ISO 374).

Protective Viton $\overline{\mathbb{B}}$ / fluoroelastomer gloves (EN ISO 374). Minimum layer thickness in mm:

0,4

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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: If OES or MEL is exceeded. Gas mask filter A (EN 14387), code colour brown 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:	Liquid
Colour:	Light brown, Clear
Odour:	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.
Flammability:	Flammable
Lower explosion limit:	There is no information available on this parameter.
Upper explosion limit:	There is no information available on this parameter.
Flash point:	63 °C
Auto-ignition temperature:	There is no information available on this parameter.
Decomposition temperature:	There is no information available on this parameter.
pH:	Mixture is non-soluble (in water).
Kinematic viscosity:	<7 mm2/s (40°C)
Solubility:	Insoluble
Partition coefficient n-octanol/water (log value):	Does not apply to mixtures.
Vapour pressure:	There is no information available on this parameter.
Density and/or relative density:	0,826 g/ml (15°C)
Relative vapour density:	Vapours heavier than air.
Particle characteristics:	Does not apply to liquids.
9.2 Other information	
Explosives:	There is no information available on this parameter.
Oxidising liquids:	No

SECTION 10: Stability and reactivity



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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**

Heating, open flame, ignition sources

10.5 Incompatible materials

Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

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).

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	>2000	mg/kg	J		calculated value
Acute toxicity, by dermal route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by inhalation:	ATE	>20	mg/l/4h			calculated value,
						Vapours
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.

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	>4951	mg/m3/4h	Rat	OECD 403 (Acute	Analogous
			-		Inhalation Toxicity)	conclusion,
						Vapours
Skin corrosion/irritation:					OECD 404 (Acute	Not irritant,
					Dermal	Analogous
					Irritation/Corrosion)	conclusion
Serious eye damage/irritation:					OECD 405 (Acute Eye	Not irritant,
					Irritation/Corrosion)	Analogous
						conclusion
Respiratory or skin					OECD 406 (Skin	Not sensitizising,
sensitisation:					Sensitisation)	Analogous
						conclusion
Germ cell mutagenicity:					OECD 473 (In Vitro	Negative,
					Mammalian	Analogous
					Chromosome	conclusion
					Aberration Test)	



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Germ cell mutagenicity:	OECD 474 (M	ammalian Negative,
	Erythrocyte	Analogous
	Micronucleus	Test) conclusion
Germ cell mutagenicity:	Salmonella OECD 471 (Ba	acterial Negative
	typhimurium Reverse Mutat	(ion Test)
Carcinogenicity:	OECD 453 (Co	ombined Negative,
	Chronic	Analogous
	Toxicity/Carcir	nogenicity conclusion
	Studies)	
Reproductive toxicity:	OECD 414 (Pr	enatal Negative,
	Developmenta	I Toxicity Analogous
	Study)	conclusion
Specific target organ toxicity -	OECD 408 (Re	epeated Negative,
repeated exposure (STOT-RE):	Dose 90-Day (Oral Analogous
	Toxicity Study	in conclusion
	Rodents)	
Aspiration hazard:		Yes
Symptoms:		unconsciousness
		, headaches,
		dizziness,
		mucous
		membrane
		irritation

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by dermal route:						Experiences on
						persons.,
						Harmful
Acute toxicity, by inhalation:						Experiences on
						persons.,
						Harmful
Acute toxicity, by inhalation:	LCLo	>4,6	mg/l/1h	Rat		Mist
Skin corrosion/irritation:		,	ŭ	Rabbit	OECD 404 (Acute	Not irritant,
					Dermal	Repeated
					Irritation/Corrosion)	exposure may
						cause skin
						dryness or
						cracking.
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye	Not irritant
					Irritation/Corrosion)	
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin contact)
sensitisation:					Sensitisation)	
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative
				typhimurium	Reverse Mutation Test)	- 0
Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro	Negative
5 ,					Mammalian Cell Gene	0
					Mutation Test)	
Germ cell mutagenicity:					OECD 473 (In Vitro	Negative
					Mammalian	- 0
					Chromosome	
					Aberration Test)	
Reproductive toxicity:	NOAEL	100	mg/kg		OECD 421	Negative
			bw/d		(Reproduction/Developm	- 0
					ental Toxicity Screening	
					Test)	
Reproductive toxicity				Rat	OECD 414 (Prenatal	Analogous
(Developmental toxicity):					Developmental Toxicity	conclusion
((a))					Study)	



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Symptoms:						drying of the skin., may cause headaches and vertigo., nausea, drop in blood pressure, diarrhoea, unconsciousness
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEL	863	mg/m3	Rat	OECD 413 (Subchronic Inhalation Toxicity - 90- Day Study)	Vapours, Analogous conclusion
Distillates (petroleum), hydrotro	eated heavy	naraffinic				
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	Analogous conclusion
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	Analogous conclusion
Acute toxicity, by inhalation:	LC50	>5,53	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Aerosol, Analogous conclusion
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant, Analogous conclusion
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant, Analogous conclusion
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact), Analogous conclusion
Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	NegativeChinese hamster
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative, Analogous conclusion
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative, Analogous conclusion
Germ cell mutagenicity:				Mammalian	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative, Analogous conclusion
Carcinogenicity:				Mouse	OECD 451 (Carcinogenicity Studies)	Negative, Analogous conclusion78 weeks, dermal
Reproductive toxicity:				Rat	OECD 421 (Reproduction/Developm ental Toxicity Screening Test)	Negative, Analogous conclusionoral
Reproductive toxicity (Developmental toxicity):				Rat	OECD 414 (Prenatal Developmental Toxicity Study)	Negative, Analogous conclusionderma
Symptoms:						coughing, respiratory distress, nausea and vomiting., diarrhoea
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	LOAEL	125	mg/kg	Rat	OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	Analogous conclusion



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Specific target organ toxicity - repeated exposure (STOT-RE), dermal:	NOAEL	30	mg/kg	Rat	OECD 411 (Subchronic Dermal Toxicity - 90-day Study)	Analogous conclusion
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEL	1000	mg/kg	Rabbit	OECD 410 (Repeated Dose Dermal Toxicity - 90-Day)	Analogous conclusion
Reaction mass of isomers of: (C7-9-alkyl 3-(3	.5-di-tert-buty	I-4-hydroxyphe	enyl)propionate		
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	> 2000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	> 2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact
Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	NegativeChinese hamster
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Carcinogenicity: Aspiration hazard:				Rat		Negative, Analogous conclusion Negative
2-Ethylhexanol	Endpoint	Value	Unit	Organism	Test method	Notes
Lovicity / attact		Value				Notes
Toxicity / effect Acute toxicity, by oral route:	LD50	2047	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by oral route: Acute toxicity, by dermal route:		2047 >3000	mg/kg mg/kg		OECD 401 (Acute Oral Toxicity) OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Skin corrosion/irritation:	LD50	_		Rat	Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 404 (Acute Dermal	Aerosol Skin Irrit. 2
Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Skin corrosion/irritation: Serious eye damage/irritation:	LD50 LD50	>3000	mg/kg	Rat Rat Rabbit Rabbit	Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 404 (Acute	Skin Irrit. 2 Eye Irrit. 2
Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation:	LD50 LD50	>3000	mg/kg	Rat Rat Rabbit	Toxicity)OECD 402 (Acute Dermal Toxicity)OECD 404 (Acute Dermal Irritation/Corrosion)OECD 405 (Acute Eye	Skin Irrit. 2
Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity:	LD50 LD50	>3000	mg/kg	Rat Rat Rabbit Rabbit Guinea pig Salmonella typhimurium	Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 471 (Bacterial Reverse Mutation Test)	Skin Irrit. 2 Eye Irrit. 2 No (skin contact)literature Negative
Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity:	LD50 LD50	>3000	mg/kg	Rat Rat Rabbit Rabbit Guinea pig Salmonella	Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 471 (Bacterial Reverse Mutation Test) OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Skin Irrit. 2 Eye Irrit. 2 No (skin contact)literature Negative Negative
Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity:	LD50 LD50	>3000	mg/kg	Rat Rat Rabbit Rabbit Guinea pig Salmonella typhimurium	Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 471 (Bacterial Reverse Mutation Test) OECD 473 (In Vitro Mammalian Chromosome Aberration Test) OECD 476 (In Vitro	Skin Irrit. 2 Eye Irrit. 2 No (skin contact)literature Negative
Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Skin corrosion/irritation: Serious eye damage/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity:	LD50 LD50	>3000	mg/kg	Rat Rat Rabbit Rabbit Guinea pig Salmonella typhimurium	Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 471 (Bacterial Reverse Mutation Test) OECD 473 (In Vitro Mammalian Chromosome Aberration Test) OECD 476 (In Vitro Mammalian Cell Gene Mutation Test) OECD 451	Skin Irrit. 2 Eye Irrit. 2 No (skin contact)literature Negative Negative
Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity:	LD50 LD50 LC50	>3000 2,7	mg/kg mg/l/4h	Rat Rat Rabbit Guinea pig Salmonella typhimurium Mammalian	Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 471 (Bacterial Reverse Mutation Test) OECD 473 (In Vitro Mammalian Chromosome Aberration Test) OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Skin Irrit. 2 Eye Irrit. 2 No (skin contact)literature Negative Negative



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	1	1	1	1		
Specific target organ toxicity - single exposure (STOT-SE):						Irritation of the respiratory tract, STOT SE 3, H335
Symptoms:						unconsciousness , drop in blood pressure, vomiting, headaches, cramps, drowsiness, mucous membrane irritation, dizziness, nausea
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	200	mg/kg bw/d	Mouse		
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	125	mg/kg bw/d	Rat	OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEC	0,6384	mg/l	Rat	OECD 413 (Subchronic Inhalation Toxicity - 90- Day Study)	Vapours
Hydrocarbons, C10-C13, n-alka	nos isoalkan	as cyclics <2	% aromatics			
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat		Notes
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>5,28	mg/l/4h	Rat		Vapours
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant, Analogous conclusion
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant, Analogous conclusion
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact), Analogous conclusion
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mammalian	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Aspiration hazard:						Yes
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	>=1000	mg/kg bw/d	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)	Negative

11.2. Information on other hazards

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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes				
Endocrine disrupting properties:						Does not apply				
						to mixtures.				



Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.5. Results of PBT							No PBT
and vPvB assessment							substance, No vPvB substance
Water solubility:							Product floats of the water surface.
12.1. Toxicity to fish:	LL50	96h	>1000	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOELR	28d	0,101	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to daphnia:	EL50	48h	>1000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOELR	21d	0,176	mg/l	Daphnia magna	, , , , , , , , , , , , , , , , , , ,	
12.1. Toxicity to algae:	EL50	72h	>1000	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	



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12.2. Persistence and degradability:		28d	80	%	activated sludge	OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
Other organisms:	EL50	48h	>1000	mg/l	Tetrahymen pyriformis		

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	2	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	>12,6	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	3,22	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to fish:	NOEC/NOEL	96h	1,42	mg/l			
12.2. Persistence and degradability:		28d	0	%		OECD 310 (Ready Biodegradability - CO2 in sealed vessels (Headspace Test))	Not readily biodegradable
12.3. Bioaccumulative potential:	BCF		1332				
12.3. Bioaccumulative potential:	Log Pow		3,74- 5,24				A notable biological accumulation potential has t be expected (LogPow > 3).
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
12.4. Mobility in soil:	Log Koc		3,75			OECD 121 (Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using HPLC)	
Toxicity to bacteria:	EC50	3h	>1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Other information:	AOX		0	%			No
Water solubility:							Slight

Distillates (petroleum), hydrotreated heavy paraffinic										
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes			
12.1. Toxicity to fish:	NOEC/NOEL	96h	>100	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)				
12.1. Toxicity to fish:	NOEC/NOEL	14d	1000	mg/l	Oncorhynchus mykiss	QSAR				



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12.1. Toxicity to daphnia:	EL50	48h	10000	mg/l	Daphnia magna	OECD 202	Analogous
<i>,</i> , ,				5		(Daphnia sp.	conclusion
						Acute	
						Immobilisation	
						Test)	
12.1. Toxicity to daphnia:	LL50	96h	>10000	mg/l		OECD 202	
						(Daphnia sp.	
						Acute	
						Immobilisation	
						Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	10	mg/l	Daphnia magna	OECD 211	Analogous
						(Daphnia magna	conclusion
						Reproduction Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	>=100	mg/l	Pseudokirchneriell	OECD 201 (Alga,	
					a subcapitata	Growth Inhibition	
						Test)	
12.2. Persistence and		28d	31	%		OECD 301 F	Not readily
degradability:						(Ready	biodegradable,
						Biodegradability -	Analogous
						Manometric	conclusion
						Respirometry Test)	N. DDT
12.5. Results of PBT							No PBT
and vPvB assessment							substance, No
							vPvB substance
Water solubility:							Insoluble

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.5. Results of PBT	•						No PBT
and vPvB assessment							substance, No vPvB substance
12.1. Toxicity to fish:	LC50	96h	>74	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	>100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	>=1	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	>3	mg/l	Scenedesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	4	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Not readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		9,2			,	Low
12.3. Bioaccumulative potential:	BCF	35d	260			OECD 305 (Bioconcentration - Flow-Through Fish Test)	Concentration in organisms possible.Oncorhy nchus mykiss
12.4. Mobility in soil:						,	Adsorption in ground.
2-Ethylhexanol						-	
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes



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12.1. Toxicity to fish:	LC50	96h	17,1	mg/l	Leuciscus idus	Regulation (EC) 440/2008 C.1 (ACUTE TOXICITY FOR FISH)	
12.1. Toxicity to fish:	LC50	96h	28,2	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	39	mg/l	Daphnia magna	Regulation (EC) 440/2008 C.2 (DAPHNIA SP. ACUTE IMMOBILISATION TEST)	
12.1. Toxicity to algae:	EC50	72h	11,5	mg/l	Scenedesmus subspicatus	Regulation (EC) 440/2008 C.3 (FRESHWATER ALGAE AND CYANOBACTERI A, GROWTH INHIBITION TEST)	
12.2. Persistence and degradability:	COD	14d	100	%	activated sludge	OECD 301 C (Ready Biodegradability - Modified MITI Test (I))	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		2,9				Low
12.3. Bioaccumulative potential:	BCF		25,33				calculated value
12.4. Mobility in soil:			1,42				Not to be expected
12.4. Mobility in soil:	Koc		800				
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	24h	>300	mg/l	activated sludge		
Toxicity to bacteria:	EC50	3h	540	mg/l	Pseudomonas putida		
Toxicity to bacteria:	EC50	12h	> 100	mg/l	activated sludge		

Hydrocarbons, C10-C13, Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>1000	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)	
12.1. Toxicity to algae:	EC50	72h	>1000	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:							Readily biodegradable
12.3. Bioaccumulative potential:	BCF		10-2500				High

SECTION 13: Disposal considerations

13.1 Waste treatment methods



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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) 13 07 03 other fuels (including mixtures) Recommendation: Sewage disposal shall be discouraged. Pay attention to local and national official regulations. Implement substance recycling. 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

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. 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):	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. 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:

Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC):

~ 90,3 %

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information



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Revised sections: These details refer to the product as it is delivered. Employee instruction/training in handling hazardous materials is required.

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

Classification in accordance with regulation	Evaluation method used		
(EC) No. 1272/2008 (CLP)			
Asp. Tox. 1, H304	Classification according to calculation procedure.		
Aquatic Chronic 3, H412	Classification according to calculation procedure.		

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).

H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.
H413 May cause long lasting harmful effects to aquatic life.
EUH066 Repeated exposure may cause skin dryness or cracking.
EUH044 Risk of explosion if heated under confinement.
Asp. Tox. — Aspiration hazard
Aquatic Chronic — Hazardous to the aquatic environment - chronic

Acute Tox. — Acute toxicity - oral Acute Tox. — Acute toxicity - dermal

Acute Tox. — Acute toxicity - definal Acute Tox. — Acute toxicity - inhalation

Skin Irrit. — Skin irritation

Eve Irrit. — Eye irritation

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STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation

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.

ECHÁ 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)



ആ Page 20 of 21 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0020 Replacing version dated / version: 18.07.2019 / 0019 Valid from: 01.11.2021 PDF print date: 01.11.2021 Bio Diesel Additiv BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany) BCF **Bioconcentration factor** BSEF The International Bromine Council body weight bw 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) European Community EC 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 FN European Norms EPA United States Environmental Protection Agency (United States of America) ErCx, $E\mu Cx$, ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants) et cetera etc. FU European Union EVAL Ethylene-vinyl alcohol copolymer Fax number Fax. gen. general Globally Harmonized System of Classification and Labelling of Chemicals GHS GWP Global warming potential Adsorption coefficient of organic carbon in the soil Koc octanol-water partition coefficient Kow IARC International Agency for Research on Cancer International Air Transport Association IATA IBC (Code) International Bulk Chemical (Code) IMDG-code International Maritime Code for Dangerous Goods incl. including, inclusive IUCLID International Uniform Chemical Information Database IUPAC International Union for Pure Applied Chemistry Lethal Concentration to 50 % of a test population LC50 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. not available n.av. not checked n.c. n.d.a. no data available NLP No-longer-Polymer NOEC. NOEL No Observed Effect Concentration/Level OECD Organisation for Economic Co-operation and Development org. organic PBT persistent, bioaccumulative and toxic Polyethylene PF 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) 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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SVHC Substances of Very High Concern Telephone Tel. TOC Total organic carbon UN RTDG United Nations Recommendations on the Transport of Dangerous Goods VOC Volatile organic compounds very persistent and very bioaccumulative vPvB 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.

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