

Page 1 of 22 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 Bio Diesel Additive**

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

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Bio Diesel Additiv Bio Diesel Additive

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 1

Asp. Tox. Aquatic Chronic

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Hazard statement

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)



Page 2 of 22

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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 Bio Diesel Additive



Danger

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

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**

01-2119457273-39-XXXX
918-481-9
60-80
EUH066
Asp. Tox. 1, H304
01-2119539586-27-XXXX
248-363-6
27247-96-7
5-15
EUH066
Acute Tox. 4, H302
Acute Tox. 4, H312
Acute Tox. 4, H332
Aquatic Chronic 2, H411



Page 3 of 22 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 Bio Diesel Additive

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
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

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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



Page 4 of 22 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 Bio Diesel Additive

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** n.c.

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media

CO2 Extinction powder Foam Cool container at risk with water.

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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



Page 5 of 22 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 Bio Diesel Additive

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.

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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

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)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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

Chemical Name	Hydrocarbons, C1	0-C13, n-alkanes, isoalkanes, cycli	ics, <2% aromatics	
WEL-TWA: 800 mg/m3		WEL-STEL:		
Monitoring procedures:	-	Draeger - Hydrocarbons 0,1%/c (8*	1 03 571)	
	-	Draeger - Hydrocarbons 2/a (81 03	581)	
	-	Compur - KITA-187 S (551 174)		
BMGV:			Other information: (O	EL acc. to RCP-method,
			paragraphs 84-87, EH4	40)
Chemical Name	2-Ethylhexanol			
WEL-TWA: 1 ppm (5,4 mg/m3) (W	/EL, EU)	WEL-STEL:		
Monitoring procedures:	-	Draeger - Alcohol 100/a (CH 29 70	1)	
BMGV:			Other information:	
Chamical Name	Hydrocarbons C1	0-C13 p-alkanes isoalkanes ovcli	ics <2% aromatics	
Chemical Name	Hydrocarbons, C1	0-C13, n-alkanes, isoalkanes, cycli	ics, <2% aromatics	
WEL-TWA: 800 mg/m3		WEL-STEL:	*	
	-	WEL-STEL: Draeger - Hydrocarbons 0,1%/c (8	1 03 571)	
WEL-TWA: 800 mg/m3	-	WEL-STEL: Draeger - Hydrocarbons 0,1%/c (8 Draeger - Hydrocarbons 2/a (81 03	1 03 571)	
WEL-TWA: 800 mg/m3 Monitoring procedures:	-	WEL-STEL: Draeger - Hydrocarbons 0,1%/c (8	1 03 571) 5 581)	
WEL-TWA: 800 mg/m3	-	WEL-STEL: Draeger - Hydrocarbons 0,1%/c (8 Draeger - Hydrocarbons 2/a (81 03	1 03 571) 581) Other information: (O	EL acc. to RCP-method,
WEL-TWA: 800 mg/m3 Monitoring procedures:	-	WEL-STEL: Draeger - Hydrocarbons 0,1%/c (8 Draeger - Hydrocarbons 2/a (81 03	1 03 571) 5 581)	EL acc. to RCP-method,
WEL-TWA: 800 mg/m3 Monitoring procedures: BMGV:	- - - Oil mist, mineral	WEL-STEL: Draeger - Hydrocarbons 0,1%/c (8 Draeger - Hydrocarbons 2/a (81 03	1 03 571) 581) Other information: (O	EL acc. to RCP-method,
WEL-TWA: 800 mg/m3 Monitoring procedures: BMGV: BMGV: BMGV: WEL-TWA: 5 mg/m3 (Mineral oil, e	- - - Oil mist, mineral	WEL-STEL: Draeger - Hydrocarbons 0,1%/c (8 Draeger - Hydrocarbons 2/a (81 03	1 03 571) 581) Other information: (O	EL acc. to RCP-method,
WEL-TWA: 800 mg/m3 Monitoring procedures: BMGV:	- - - Oil mist, mineral	WEL-STEL: Draeger - Hydrocarbons 0,1%/c (8 Draeger - Hydrocarbons 2/a (81 03 Compur - KITA-187 S (551 174)	1 03 571) 581) Other information: (O	EL acc. to RCP-method, Ю)



B Page 6 of 22

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 Bio Diesel Additive

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Monitoring procedures: BMGV: --- Draeger - Oil Mist 1/a (67 33 031)

Other information: ---

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 effects	DNEL	0,52	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,087	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,025	mg/kg bw/day	
Consumer	Human - dermal	Long term, local effects	DNEL	0,022	mg/cm2	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	1	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	0,35	mg/m3	
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 compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - sediment, freshwater		PNEC	0,37	mg/kg dw	
	Environment - sediment, marine		PNEC	0,037	mg/kg dw	
	Environment - soil		PNEC	10	mg/kg dw	
	Environment - freshwater		PNEC	0,018	mg/l	
	Environment - marine		PNEC	0,002	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	0,018	mg/l	
	Environment - oral (animal feed)		PNEC	41,33	mg/kg feed	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,74	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,83	mg/kg bw/d	
Consumer Human - oral		Long term, systemic effects	DNEL	0,93	mg/kg bw/d	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	1,67	mg/kg	



Page 7 of 22 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 Bio Diesel Additive

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Workers / employees	Human - inhalation	Long term, systemic	DNEL	6,6	mg/m3	
		effects				

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 (intermittent) release		PNEC	0,17	mg/l	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - sediment, freshwater		PNEC	0,28	mg/kg dw	
	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	/		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	

(B) 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 controls8.2.1 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.



Page 8 of 22 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 Bio Diesel Additive

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.

Protective hand cream recommended.

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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). If applicable Protective nitrile gloves (EN ISO 374). Protective Viton® / fluoroelastomer gloves (EN ISO 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.

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.



Page 9 of 22

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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 Bio Diesel Additive

Flash point:

Auto-ignition temperature: Decomposition temperature: pH: 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

Explosives: Oxidising liquids:

63 °C

There is no information available on this parameter. There is no information available on this parameter. Mixture is non-soluble (in water). <7 mm2/s (40°C) Insoluble Does not apply to mixtures. There is no information available on this parameter. 0,826 g/ml (15°C) Vapours heavier than air. Does not apply to liquids.

There is no information available on this parameter. No

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
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			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 sensitisation:						n.d.a.
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.

L	Trydiocal bons, c To-c To, n-aikanes, isoaikanes, cyclics, <2 % alomatics									
	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			



Page 10 of 22 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 Bio Diesel Additive

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,
6 ,					Mammalian	Analogous
					Chromosome	conclusion
					Aberration Test)	
Germ cell mutagenicity:					OECD 474 (Mammalian	Negative,
,-					Erythrocyte	Analogous
					Micronucleus Test)	conclusion
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative
				typhimurium	Reverse Mutation Test)	liogaaro
Carcinogenicity:				.,	OECD 453 (Combined	Negative,
ea. eegee.ty:					Chronic	Analogous
					Toxicity/Carcinogenicity	conclusion
					Studies)	Conclusion
Reproductive toxicity:					OECD 414 (Prenatal	Negative,
reproductive texterty:					Developmental Toxicity	Analogous
					Study)	conclusion
Specific target organ toxicity -					OECD 408 (Repeated	Negative,
repeated exposure (STOT-RE):					Dose 90-Day Oral	Analogous
					Toxicity Study in	conclusion
					Rodents)	CONClusion
Aspiration hazard:						Yes
Symptoms:	-					unconsciousnes
						, headaches,
						dizziness,
						mucous
						membrane
						irritation
						initation

2-ethylhexyl nitrate						
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:				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)	



Page 11 of 22 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 Bio Diesel Additive

Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Germ cell mutagenicity:				Human being	OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Reproductive toxicity:	NOAEL	100	mg/kg bw/d		OECD 421 (Reproduction/Developm ental Toxicity Screening Test)	Negative
Reproductive toxicity (Developmental toxicity):				Rat	OECD 414 (Prenatal Developmental Toxicity Study)	Analogous conclusion
Specific target organ toxicity - repeated exposure (STOT-RE), dermal:	NOAEL	500	mg/kg bw/d	Rabbit		Negativedermal
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

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	>2000	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:					OECD 473 (In Vitro	NegativeChinese
					Mammalian	hamster
					Chromosome	
					Aberration Test)	
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative,
				typhimurium	Reverse Mutation Test)	Analogous
						conclusion
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian	Negative,
					Erythrocyte	Analogous
					Micronucleus Test)	conclusion
Germ cell mutagenicity:				Mammalian	OECD 476 (In Vitro	Negative,
					Mammalian Cell Gene	Analogous
					Mutation Test)	conclusion



B Page 12 of 22

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 Bio Diesel Additive

Carcinogenicity:				Mouse	OECD 451	Negative,
					(Carcinogenicity Studies)	Analogous
						conclusion78
						weeks, dermal
Reproductive toxicity:				Rat	OECD 421	Negative,
					(Reproduction/Developm	Analogous
					ental Toxicity Screening	conclusionoral
					Test)	
Reproductive toxicity				Rat	OECD 414 (Prenatal	Negative,
(Developmental toxicity):					Developmental Toxicity	Analogous
					Study)	conclusiondermal
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	Rat	OECD 411 (Subchronic	Analogous
repeated exposure (STOT-RE),					Dermal Toxicity - 90-day	conclusion
dermal:					Study)	
Specific target organ toxicity -	NOEC	~220	mg/m3	Rat	OECD 412 (Subacute	Analogous
repeated exposure (STOT-RE),					Inhalation Toxicity - 28-	conclusion,
inhalat.:					Day Study)	Aerosol
Symptoms:						coughing,
						respiratory
						distress, nausea
						and vomiting.,
						diarrhoea
Specific target organ toxicity -	LOAEL	125	mg/kg	Rat	OECD 408 (Repeated	Analogous
repeated exposure (STOT-RE),					Dose 90-Day Oral	conclusion
oral:					Toxicity Study in	
					Rodents)	

Reaction mass of isomers of:						
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	Not irritant
					Dermal	
					Irritation/Corrosion)	
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye	Not irritant
, 5					Irritation/Corrosion)	
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin contact)
sensitisation:					Sensitisation)	
Germ cell mutagenicity:					OECD 473 (In Vitro	NegativeChinese
					Mammalian	hamster
					Chromosome	
					Aberration Test)	
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative
Com con matagementy.				typhimurium	Reverse Mutation Test)	lioguiro
Germ cell mutagenicity:				- typ:///tantain	OECD 474 (Mammalian	NegativeChinese
com con managementy.					Erythrocyte	hamster
					Micronucleus Test)	
Reproductive toxicity:	NOAEL	150-600	mg/kg	Mouse	OECD 415 (One-	
reproductive toxicity:	110/12E	100 000	bw/d	mouse	Generation	
					Reproduction Toxicity	
					Study)	
Carcinogenicity:				Rat		Negative,
Careniogeniony.				i vai		Analogous
						conclusion
Aspiration hazard:						Negative
Aspiration nazaru.						negative
2-Ethylhexanol						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes



Page 13 of 22 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 Bio Diesel Additive

Acute toxicity, by oral route:	LD50	2047	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>3000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	2,7	mg/l/4h			Aerosol
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Skin Irrit. 2
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Irrit. 2
Respiratory or skin sensitisation:				Guinea pig		No (skin contact)literature
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	NegativeChines hamster
Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Reproductive toxicity:	NOAEL	3000	ppm	Rat	OECD 416 (Two- generation Reproduction Toxicity Study)	Negative
Reproductive toxicity (Developmental toxicity):				Mouse	OECD 414 (Prenatal Developmental Toxicity Study)	Negativeoral
Carcinogenicity:	NOAEL	750	mg/kg bw/d	Mouse	OECD 451 (Carcinogenicity Studies)	Negative
Specific target organ toxicity - single exposure (STOT-SE):						Irritation of the respiratory tract, STOT SE 3, H335
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)	
Symptoms:						unconsciousnes , 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), inhalat.:	NOAEC	0,6384	mg/l	Rat	OECD 413 (Subchronic Inhalation Toxicity - 90- Day Study)	Vapours

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat		
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



Page 14 of 22 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 Bio Diesel Additive

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Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Not irritant.
Skin conosion/initation.				Rabbit	Dermal	Analogous
					Irritation/Corrosion)	conclusion
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye	Not irritant,
Senous eye damage/imitation:				Rabbit	Irritation/Corrosion)	Analogous
					Initiation/Contosion)	conclusion
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin
sensitisation:				Ouniea pig	Sensitisation)	contact),
Sensilisation.					Sensilisation)	Analogous
						conclusion
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative,
Centricen mulayemony.				typhimurium	Reverse Mutation Test)	Analogous
				typhinnunum	Reverse wutation rest)	conclusion
Germ cell mutagenicity:				Mammalian	OECD 476 (In Vitro	Negative,
Gerni cell mutagenicity.				Wallinalian	Mammalian Cell Gene	Analogous
						conclusionChines
					Mutation Test)	e hamster
Germ cell mutagenicity:				Human being	OECD 473 (In Vitro Mammalian	Negative,
						Analogous
					Chromosome	conclusion
0					Aberration Test)	NI (1
Carcinogenicity:				Rat	OECD 453 (Combined	Negative,
					Chronic	Analogous
					Toxicity/Carcinogenicity	conclusion
• • • • •					Studies)	
Carcinogenicity:				Mouse	OECD 451	Negative,
					(Carcinogenicity Studies)	Analogous
-	-					conclusion
Specific target organ toxicity -	NOAEL	>=1000	mg/kg	Rat	OECD 422 (Combined	Negative,
repeated exposure (STOT-RE),			bw/d		Repeated Dose Tox.	Analogous
oral:					Study with the	conclusion
					Reproduction/Developm.	
					Tox. Screening Test)	
Aspiration hazard:						Yes

11.2. Information on other hazards

Bio Diesel Additiv Bio Diesel Additive						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Endocrine disrupting properties:	•					Does not apply to mixtures.
Other information:						No other relevant information available on adverse effects on health.

Hydrocarbons, C10-C13, n-al	kanes, isoaikan	ies, cyclics, <	2% aromatics			
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Other information:						Repeated
						exposure may
						cause skin
						dryness or
						cracking.

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification). Bio Diesel Additiv Bio Diesel Additive



Page 15 of 22 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 Bio Diesel Additive

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							n.d.a.
degradability:							
12.3. Bioaccumulative							n.d.a.
potential:							
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.

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Water solubility:							Product floats or 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)	
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		

2-ethylhexyl nitrate							
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			



Page 16 of 22 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 Bio Diesel Additive

12.2. Persistence and		28d	0	%		OECD 310	Not readily
degradability:		200	Ū	,0		(Ready	biodegradable
aogradaomyr						Biodegradability -	Diedegiadabie
						CO2 in sealed	
						vessels	
						(Headspace Test))	
12.3. Bioaccumulative potential:	BCF		1332			(
12.3. Bioaccumulative	Log Pow		3,74-				High
potential:			5,24				
12.5. Results of PBT			- ,				No PBT
and vPvB assessment							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	
				Ū		(Activated Sludge,	
						Respiration	
						Inhibition Test	
						(Carbon and	
						Ammonium	
						Oxidation))	
Other information:	AOX		0	%		,,,	No
Water solubility:							Slight

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	QSÁR	
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 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 (Daphnia magna Reproduction Test)	Analogous conclusion
12.1. Toxicity to algae:	NOEC/NOEL	72h	>=100	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	31	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Not readily biodegradable, Analogous conclusion
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substanc
Water solubility:							Insoluble



Page 17 of 22 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 Bio Diesel Additive

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Reaction mass of isome Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.5. Results of PBT and vPvB assessment							No PBT substance, No
Other organisms:	NOEC/NOEL	28d	31,6	mg/kg		OECD 217 (Soil Microorganisms - Carbon Transformation Test)	vPvB substance
12.1. Toxicity to fish:	LC50	96h	>74	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOEC/NOEL	35d	0,001	mg/l	Brachydanio rerio	OECD 210 (Fish, Early-Life Stage Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	>100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	>=1	mg/l	Daphnia magna	Test) OECD 202 (Daphnia sp. Acute Immobilisation Test)	Water toxicology is above the water-solubility value.
12.1. Toxicity to algae:	EC50	72h	>3	mg/l	Scenedesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	2-4	%	activated sludge	OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Not readily biodegradable
12.2. Persistence and degradability:							Mechanical precipitation possible.
12.3. Bioaccumulative potential:	Log Pow		9,2				Possible@20°C
12.3. Bioaccumulative potential:	BCF	35d	260			OECD 305 (Bioconcentration - Flow-Through Fish Test)	Concentration ir organisms possible.Oncorf nchus mykiss
12.4. Mobility in soil:							Adsorption in ground., To be expected
12.4. Mobility in soil:	Кос		7673- 18432			OECD 106 (Adsorption/Desor ption Using a Batch Equilibrium Method)	
Toxicity to bacteria:	IC50	3h	>100	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Other information:	EC50	19d	>100	mg/kg		OECD 208 (Terrestrial Plants, Growth Test)	Brassica rapa



B Page 18 of 22

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 Bio Diesel Additive

Toxicity to annelids:	EC50	14d	>1000	mg/kg	Eisenia foetida	OECD 207 (Earthworm, Acute Toxicity Tests)	artificial soil
Toxicity to annelids:	NOEC/NOEL	56d	250	mg/kg	Eisenia foetida	OECD 222 (Earthworm Reproduction Test (Eisenia fetida/Eisenia andrei))	artificial soil
Water solubility:			0,5	µg/l			Insoluble

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
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	16,6	mg/l	Desmodesmus 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			OECD 117 (Partition Coefficient (n- octanol/water) - HPLC method)	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	, n-alkanes, isoa	lkanes, cyc	clics, <2% a	romatics			
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)	



Page 19 of 22 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0020

œ

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 Bio Diesel Additive

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:		28d	80	%	activated sludge	OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable, Analogous conclusion
12.3. Bioaccumulative potential:	BCF		10-2500				High

SECTION 13: Disposal considerations

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)

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.
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



Page 20 of 22

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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 Bio Diesel Additive

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):

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

1-16

~ 90,3 %

Revised sections:

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

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 (EC) No. 1272/2008 (CLP)	Evaluation method used
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 - inhalation Skin Irrit. — Skin irritation Eye Irrit. — Eye irritation 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).



Page 21 of 22 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 Bio Diesel Additive

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).

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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:

according, according to acc., acc. to Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the ADR International Carriage of Dangerous Goods by Road) Adsorbable organic halogen compounds AOX approx. approximately Art., Art. no. Article number ASTM ASTM International (American Society for Testing and Materials) ATE Acute Toxicity Estimate Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany) BAM 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) FC 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** United States Environmental Protection Agency (United States of America) FPA ErCx, $E\mu Cx$, 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 number Fax. gen. general GHS Globally Harmonized System of Classification and Labelling of Chemicals 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 including, inclusive incl. 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)



- 68
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
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Bio Diesel Additiv
Bio Diesel Additive
Log Koc Logarithm of adsorption coefficient of organic carbon in the soil
Log Kow, Log Pow Logarithm of octanol-water partition coefficient
LQ Limited Quantities
MARPOL International Convention for the Prevention of Marine Pollution from Ships
n.a. not applicable
n.av. not available
n.c. not checked
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
org. organic
OSHA Occupational Safety and Health Administration (USA)
PBT persistent, bioaccumulative and toxic
PE 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.
RID 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
Tel. Telephone
TOC Total organic carbon
UN RTDG United Nations Recommendations on the Transport of Dangerous Goods
VOC Volatile organic compounds
vPvB very persistent and very bioaccumulative
wwt 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.

No responsibility. These statements were made by: Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

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