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

Revision date / version: 27.04.2020 / 0035

Replacing version dated / version: 06.06.2019 / 0034

Valid from: 27.04.2020 PDF print date: 27.04.2020 Engine Flush Plus 300 mL

Art.: 2657

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

1.1 Product identifier

Engine Flush Plus 300 mL

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

Cleaner

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)

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**

Skin Sens. H317-May cause an allergic skin reaction.

Asp. Tox. 1 H304-May be fatal if swallowed and enters airways.

2.2 Label elements

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



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H317-May cause an allergic skin reaction. H304-May be fatal if swallowed and enters airways.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children.

P261-Avoid breathing vapours or spray. P280-Wear protective gloves.

P301+P310-IF SWALLOWED: Immediately call a POISON CENTER / doctor. P331-Do NOT induce vomiting. P333+P313-If skin irritation or rash occurs: Get medical advice / attention.

P405-Store locked up.

P501-Dispose of contents / container to an approved waste disposal facility.

EUH066-Repeated exposure may cause skin dryness or cracking.

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., calcium salts

2.3 Other hazards

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

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

SECTION 3: Composition/information on ingredients

3.1 Substance

n.a. **3.2 Mixture**

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	
Registration number (REACH)	01-2119457273-39-XXXX
Index	
EINECS, ELINCS, NLP	918-481-9 (REACH-IT List-No.)
CAS	
content %	75-100
Classification according to Regulation (EC) 1272/2008 (CLP)	Asp. Tox. 1, H304

Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-	
Pr) esters, zinc salts	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	288-917-4
CAS	85940-28-9
content %	1-<2,5
Classification according to Regulation (EC) 1272/2008 (CLP)	Skin Irrit. 2, H315
	Eye Irrit. 2, H319
	Aquatic Chronic 2, H411

Isotridecanol, ethoxylated	
Registration number (REACH)	



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Index	
EINECS, ELINCS, NLP	500-241-6 (NLP)
CAS	69011-36-5
content %	1-<2,5
Classification according to Regulation (EC) 1272/2008 (CLP)	Aquatic Chronic 3, H412

Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., calcium salts	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	682-816-2 (REACH-IT List-No.)
CAS	722503-68-6
content %	1-<2,5
Classification according to Regulation (EC) 1272/2008 (CLP)	Skin Sens. 1B, H317

Impurities, test data and additional information may have been taken into account in classifying and labelling the product.

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.

If the person is unconscious, place in a stable side position and consult a doctor.

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.

With long-term contact:

Nausea

Dizziness

Product removes fat.

Drying of the skin.

Dermatitis (skin inflammation)

Ingestion:

Vomiting

Danger of aspiration.

Oedema of the lungs

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

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.



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Ingestion: Activated carbon

Gastric lavage (stomach washing) only under endotracheal intubation.

Subsequent observation for pneumonia and pulmonary oedema.

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media

CO₂

Extinction powder

Foam

Water jet spray

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

Hydrocarbons

Toxic pyrolysis products.

Flammable vapour/air mixtures

Dangerous vapours heavier than air.

In case of spreading near the ground, flashback to distance sources of ignition is possible.

5.3 Advice for firefighters

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

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.

6.2 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) 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.

Do not heat to temperatures close to flash point.

Take measures against electrostatic charging, if appropriate.



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Avoid contact with eyes or skin.

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

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

Observe directions on label and instructions for use. 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.

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, C		Content %:75- 100		
WEL-TWA: 800 mg/m3		WEL-STEL:			
Monitoring procedures:	-	Draeger - Hydrocarbons 2/a (81 03			
	-	Draeger - Hydrocarbons 0,1%/c (8	1 03 571)		
	-	Compur - KITA-187 S (551 174)			
BMGV:			Other information: paragraphs 84-87, E	`	to RCP-method,
Chemical Name	Oil mist, mineral				Content %:
WEL-TWA: 5 mg/m3 (Mineral oil, e	xcluding metal	WEL-STEL:			
working fluids, ACGIH)					
Monitoring procedures:	-	Draeger - Oil Mist 1/a (67 33 031)			
BMGV:			Other information:		

Phosphorodithioic acid,	mixed O,O-bis(2-ethylhexyl and	iso-Bu and iso-Pr) ester	s, zinc salts			
Area of application	Exposure route / Environmental compartment	Effect on health	Effect on health Descriptor		Unit	Note
	Environment - freshwater		PNEC	0,002	mg/l	
	Environment - marine		PNEC	0	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	0,02	mg/l	
	Environment - sediment, marine		PNEC	1,93	mg/kg dry weight	
	Environment - soil		PNEC	15,7	mg/kg dry weight	
	Environment - sewage treatment plant		PNEC	100	mg/l	
	Environment - sediment, freshwater		PNEC	19,3	mg/kg dw	



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Consumer	Human - oral	Long term, systemic effects	DNEL	0,19	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	4,8	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	1,67	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	9,6	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	6,6	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. BS EN 14042.

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

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

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

Eye/face protection:

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

Skin protection - Hand protection:

Solvent resistant protective gloves (EN 374).

If applicable

Protective nitrile gloves (EN 374).

Minimum layer thickness in mm:

0,4

Permeation time (penetration time) in minutes:

>480

Protective hand cream recommended.

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

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

Skin protection - Other:

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

Respiratory protection:

If OES or MEL is exceeded.



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

Observe wearing time limitations for respiratory protection equipment.

Thermal hazards: Not applicable

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

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

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account. Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to

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

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

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:

Colour: Yellow, Brown Odour: Characteristic Odour threshold: Not determined

pH-value: n.a.

Melting point/freezing point: Not determined Initial boiling point and boiling range: Not determined 63 °C Flash point:

Not determined Evaporation rate: Not determined Flammability (solid, gas):

Lower explosive limit: 0,6 Vol-% (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics)

Upper explosive limit: 6,1 Vol-% (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics,

> <2% aromatics) Not determined

Vapour density (air = 1): Vapours heavier than air.

0,81 g/ml (20°C) Density: Bulk density: Not determined Solubility(ies): Not determined Water solubility: Insoluble

Partition coefficient (n-octanol/water): Not determined

Auto-ignition temperature: 230 °C (DIN 51794, Hydrocarbons, C10-C13, n-alkanes, isoalkanes,

cyclics, <2% aromatics) Not determined

Decomposition temperature: <7 mm2/s (40°C) Viscosity: Explosive properties: Not determined Nο

Oxidising properties:

9.2 Other information

Miscibility: Not determined Fat solubility / solvent: Not determined Conductivity: Not determined Surface tension: Not determined Solvents content: Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

Vapour pressure:

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.



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10.3 Possibility of hazardous reactions

No decomposition if used as intended.

10.4 Conditions to avoid

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 toxicological effects

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

Engine Flush Plus 300 mL						
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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin						n.d.a.
sensitisation:						
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity -						n.d.a.
single exposure (STOT-SE):						
Specific target organ toxicity -						n.d.a.
repeated exposure (STOT-RE):						
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral	Analogous
3. 3					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)	
Germ cell mutagenicity:					OECD 474 (Mammalian	Negative,
					Erythrocyte	Analogous
					Micronucleus Test)	conclusion
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative
				typhimurium	Reverse Mutation Test)	



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Carcinogenicity:	OECD 453 (Combined Negative,
	Chronic	Analogous
	Toxicity/Card	cinogenicity conclusion
	Studies)	
Reproductive toxicity:	OECD 414 (Prenatal Negative,
	Developmen	tal Toxicity Analogous
	Study)	conclusion
Specific target organ toxicity -	OECD 408 (Repeated Negative,
repeated exposure (STOT-RE):	Dose 90-Day	/ Oral Analogous
	Toxicity Stud	ly in conclusion
	Rodents)	
Aspiration hazard:		Yes
Symptoms:		unconsciousness
		, headaches,
		dizziness
Other information:		Repeated
		exposure may
		cause skin
		dryness or
		cracking.

Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts							
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes	
Acute toxicity, by oral route:	LD50	3000	mg/kg	Rat			
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit	OECD 402 (Acute		
					Dermal Toxicity)		
Skin corrosion/irritation:				Rabbit		Skin Irrit. 2	
Serious eye damage/irritation:				Rabbit		Eye Irrit. 2	

Isotridecanol, ethoxylated						
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)	
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)	
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin contact)
sensitisation:					Sensitisation)	
Germ cell mutagenicity:				Mammalian	OECD 476 (In Vitro	Negative
					Mammalian Cell Gene	
					Mutation Test)	

SECTION 12: Ecological information

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

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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.



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12.2. Persistence and				The surfactant(s)
degradability:				contained in this
degradability.				mixture
				complies(comply)
				with the
				biodegradability
				criteria as laid
				down in
				Regulation (EC)
				No.648/2004 on
				detergents. Data
				to support this
				assertion are
				held at the
				disposal of the
				competent
				authorities of the
				Member States
				and will be made
				available to
				them, at their
				direct request or
				at the request of
				a detergent
				manufacturer.
				Isolate as much
				as possible with
				an oil separator.
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. Other adverse				n.d.a.
effects:				
Other information:	AOX			According to the
				recipe, contains
				no AOX.

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 on 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	,	
12.2. Persistence and degradability:		28d	80	%	activated sludge	OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable



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12.1. Toxicity to algae:	EL50	72h	>1000	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
Other organisms:	EL50	48h	>1000	mg/l	Tetrahymen pyriformis		

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.2. Persistence and		28d	1,5	%		OECD 301 B	Not readily
degradability:						(Ready	biodegradable
						Biodegradability -	
						Co2 Evolution	
						Test)	
12.1. Toxicity to fish:	NOEC/NOEL	96h	1,8	mg/l	Oncorhynchus	OECD 203 (Fish,	Analogous
					mykiss	Acute Toxicity	conclusion
10.1 T 12.1 C 1	1.050	001	+			Test)	
12.1. Toxicity to fish:	LC50	96h	4,5	mg/l	Oncorhynchus	OECD 203 (Fish,	Analogous
					mykiss	Acute Toxicity	conclusion
40.4 Taviaituta danbaia	FOFO	40h			Danhais magas	Test)	Analamana
12.1. Toxicity to daphnia:	EC50	48h	5,4	mg/l	Daphnia magna	OECD 202	Analogous
						(Daphnia sp. Acute	conclusion
						Immobilisation	
						Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	48h	<1	mg/l	Daphnia magna	OECD 202	Analogous
12.1. Toxiony to daprima.	NOLO/NOLL	1011	`'	ilig/i	Daprilla magna	(Daphnia sp.	conclusion
						Acute	Consideren
						Immobilisation	
						Test)	
12.1. Toxicity to algae:	LC50	96h	2,1	mg/l	Selenastrum	OECD 201 (Alga,	Analogous
					capricornutum	Growth Inhibition	conclusion
						Test)	

Isotridecanol, ethoxylated							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	5,18	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	LC50	96h	2,5	mg/l	Brachydanio rerio	Regulation (EC) 440/2008 C.1 (ACUTE TOXICITY FOR FISH)	
12.1. Toxicity to daphnia:	EC50	48h	1,5	mg/l	Daphnia magna	Regulation (EC) 440/2008 C.2 (DAPHNIA SP. ACUTE IMMOBILISATION TEST)	
12.1. Toxicity to daphnia:	EC20	21d	0,74	mg/l	Daphnia magna	QSAŔ	
12.1. Toxicity to algae:	EC50	72h	2,5	mg/l	Desmodesmus subspicatus	Regulation (EC) 440/2008 C.3 (FRESHWATER ALGAE AND CYANOBACTERI A, GROWTH INHIBITION TEST)	
Toxicity to bacteria:	EC50	3h	140	mg/l	activated sludge		EC 88/302

SECTION 13: Disposal considerations



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13.1 Waste treatment methods

For the substance / mixture / residual amounts

Soaked polluted cloths, paper or other organic materials represent a fire hazard and should be controlled, collected and disposed of. EC disposal code no .:

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

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

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

07 07 04 other organic solvents, washing liquids and mother liquors

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

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

Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

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

Observe restrictions:

Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)! Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC):

~ 90,2 %

REGULATION (EC) No 648/2004



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aliphatic hydrocarbons less than 5 % non-ionic surfactants

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections:

3

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	Evaluation method used
(EC) No. 1272/2008 (CLP)	
Skin Sens. 1, H317	Classification according to calculation procedure.
Asp. Tox. 1, H304	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).

H317 May cause an allergic skin reaction.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

Skin Sens. — Skin sensitization

Asp. Tox. — Aspiration hazard

Skin Irrit. — Skin irritation

Eye Irrit. — Eye irritation

Aquatic Chronic — Hazardous to the aquatic environment - chronic

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)

BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)

BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

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

dw dry weight

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

EC European Community



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ECHA European Chemicals Agency European Economic Community

European Inventory of Existing Commercial Chemical Substances **FINECS**

ELINCS European List of Notified Chemical Substances

European Norms ΕN

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

etc. European Union FU

EVAL Ethylene-vinyl alcohol copolymer

Fax number Fax. gen. general

Globally Harmonized System of Classification and Labelling of Chemicals GHS

GWP Global warming potential

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

Limited Quantities 10

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

OECD Organisation for Economic Co-operation and Development

org. organic

persistent, bioaccumulative and toxic PBT

PΕ Polyethylene

PNEC Predicted No Effect Concentration

parts per million ppm PVC Polyvinylchloride

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

Evaluation, Authorisation and Restriction of Chemicals)

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

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

SVHC Substances of Very High Concern

Telephone Tel.

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

wet weight wwt

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

These statements were made by

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