

Page 1 of 15 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0009 Replacing version dated / version: 22.02.2019 / 0008 Valid from: 01.11.2021 PDF print date: 01.11.2021 Deck-Harz

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

Deck-Harz

1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses of the substance or mixture:
Windscreen repair resin
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
Eye Irrit.	2	H319-Causes serious eye irritation.
STOT SE	3	H335-May cause respiratory irritation.
Skin Irrit.	2	H315-Causes skin irritation.
Skin Sens.	1	H317-May cause an allergic skin reaction.
Aquatic Acute	1	H400-Very toxic to aquatic life.
Aquatic Chronic	1	H410-Very toxic to aquatic life with long lasting effects.

2.2 Label elements

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



Page 2 of 15

œ

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0009 Replacing version dated / version: 22.02.2019 / 0008 Valid from: 01.11.2021 PDF print date: 01.11.2021 Deck-Harz



Warning

H319-Causes serious eye irritation. H335-May cause respiratory irritation. H315-Causes skin irritation. H317-May cause an allergic skin reaction. H410-Very toxic 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.

P261-Avoid breathing vapours or spray. P271-Use only outdoors or in a well-ventilated area. P273-Avoid release to the environment. P280-Wear protective gloves and eye protection / face protection.

P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312-Call a POISON CENTRE / doctor if you feel unwell.

P405-Store locked up.

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

2-hydroxyethyl methacrylate exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate

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 %).

SECTION 3: Composition/information on ingredients

3.1 Substances

n.a. 3.2 Mixtures

2-hydroxyethyl methacrylate	
Registration number (REACH)	
Index	607-124-00-X
EINECS, ELINCS, NLP, REACH-IT List-No.	212-782-2
CAS	868-77-9
content %	50-60
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315
	Eye Irrit. 2, H319
	Skin Sens. 1, H317
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	
Registration number (REACH)	
	007 100 00 0

Registration number (REACH)	
Index	607-133-00-9
EINECS, ELINCS, NLP, REACH-IT List-No.	227-561-6
CAS	5888-33-5
content %	40-50



Page 3 of 15 Safety data she

ആ

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0009 Replacing version dated / version: 22.02.2019 / 0008 Valid from: 01.11.2021 PDF print date: 01.11.2021 Deck-Harz

Classification according to Regulation (EC) 1272/2008 (CLP), M-factors

Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 STOT SE 3, H335 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	219-784-2
CAS	2530-83-8
content %	1-2,5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Eye Dam. 1, H318

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

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

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

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

Inhalation

Remove person from danger area.

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

Skin contact

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

Eye contact

Remove contact lenses.

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

Ingestion

Rinse the mouth thoroughly with water.

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

4.2 Most important symptoms and effects, both acute and delayed

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

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

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water jet spray/foam/CO2/dry extinguisher

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop: Oxides of carbon Toxic gases

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



Page 4 of 15 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0009 Replacing version dated / version: 22.02.2019 / 0008 Valid from: 01.11.2021 PDF print date: 01.11.2021 Deck-Harz

Full protection, if necessary.

അ

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.

Ensure sufficient supply of air.

Avoid contact with eyes or skin.

If applicable, caution - risk of slipping.

6.1.2 For emergency responders

See section 8 for suitable protective equipment and material specifications.

6.2 Environmental precautions

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

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

Prevent from entering drainage system.

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. Avoid inhalation of the vapours. 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. Do not store with oxidizing agents. Store in a well-ventilated place. Protect from direct sunlight and warming. Protect from frost. Store in a dry place.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters



B Page 5 of 15

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0009 Replacing version dated / version: 22.02.2019 / 0008 Valid from: 01.11.2021 PDF print date: 01.11.2021 Deck-Harz

Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note
	Environmental		-			
	compartment					
	Environment - water		PNEC	0,482	mg/kg	
	Environment - water,		PNEC	1	mg/l	
	sporadic (intermittent)					
	release					
	Environment - marine		PNEC	0,482	mg/l	
	Environment - sewage		PNEC	10	mg/l	
	treatment plant					
	Environment - sediment,		PNEC	3,79	mg/kg	
	freshwater					
	Environment - sediment,		PNEC	3,79	mg/kg	
	marine					
	Environment - soil		PNEC	0,476	mg/kg	
Consumer	Human - oral	Long term, systemic	DNEL	0,83	mg/kg	
		effects			bw/day	
Consumer	Human - dermal	Long term, systemic	DNEL	0,83	mg/kg	
		effects			bw/day	
Consumer	Human - inhalation	Long term, systemic	DNEL	2,9	mg/m3	
		effects				
Workers / employees	Human - inhalation	Long term	DNEL	4,9	mg/m3	
Workers / employees	Human - dermal	Long term	DNEL	1,3	mg/kg bw/d	

Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note
	Environmental					
	compartment					
	Environment - freshwater		PNEC	0,001	mg/l	
	Environment - marine		PNEC	0	mg/l	
	Environment - sediment, freshwater		PNEC	0,145	mg/kg dw	
	Environment - sediment, marine		PNEC	0,015	mg/kg dw	
	Environment - soil		PNEC 0,029		mg/kg dw	
	Environment - sewage treatment plant		PNEC	2	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	0,007	mg/l	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	1,45	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,83	mg/kg bw/d	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,83	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	4,9	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	1,39	mg/kg bw/d	

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane									
Area of application	Exposure route / Effect on health Descriptor Value Unit Note								
	Environmental								
	compartment								
	Environment - freshwater		PNEC	0,45	mg/l				
	Environment - marine		PNEC	0,045	mg/l				



Page 6 of 15

ആ

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0009 Replacing version dated / version: 22.02.2019 / 0008 Valid from: 01.11.2021 PDF print date: 01.11.2021 Deck-Harz

	Environment - water, sporadic (intermittent) release		PNEC	1	mg/l
	Environment - sediment		PNEC	0,79	mg/kg dry weight
	Environment - soil		PNEC	0,063	mg/kg dry weight
	Environment - sewage treatment plant		PNEC	8,2	mg/l
	Environment - sediment, freshwater		PNEC	1,6	mg/kg
	Environment - sediment, marine		PNEC	0,16	mg/kg
Consumer	Human - dermal	Short term, systemic effects	DNEL	12,5	mg/kg bw/d
Consumer	Human - inhalation	Short term, systemic effects	DNEL	43,5	mg/m3
Consumer	Human - oral	Long term, systemic effects	DNEL	5	mg/kg bw/day
Consumer	Human - dermal	Long term, systemic effects	DNEL	5	mg/kg bw/day
Consumer	Human - inhalation	Long term, systemic effects	DNEL	17	mg/m3
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	70	mg/m3
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	21	mg/kg bw/day
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	147	mg/m3
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	10	mg/kg bw/day

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.

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: Chemical resistant protective gloves (EN ISO 374). Recommended Protective gloves in butyl rubber (EN ISO 374). Protective Neoprene® / polychloroprene gloves (EN ISO 374). Minimum layer thickness in mm: 0,5 Protective gloves made of fluorocarbon rubber (EN ISO 374). Minimum layer thickness in mm: 0,4 Permeation time (penetration time) in minutes:

remeation 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.



Page 7 of 15 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0009 Replacing version dated / version: 22.02.2019 / 0008 Valid from: 01.11.2021 PDF print date: 01.11.2021 Deck-Harz

Skin protection - Other: Usual protective working garments

Respiratory protection: Normally not necessary. If OES or MEL is exceeded. Filter A P2 (EN 14387), code colour brown, white Observe wearing time limitations for respiratory protection equipment.

Thermal hazards: Not applicable

ആ

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:	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:	>100 °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:	<=20,5 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:	There is no information available on this parameter.
Relative vapour density:	There is no information available on this parameter.
Particle characteristics:	Does not apply to liquids.
9.2 Other information	
Explosives:	Product is not explosive.
Oxidising liquids:	No

SECTION 10: Stability and reactivity

10.1 Reactivity

Polymerisation due to high heat is possible. **10.2 Chemical stability** Stable with proper storage and handling. **10.3 Possibility of hazardous reactions** No dangerous reactions are known. **10.4 Conditions to avoid** See also section 7. UV-light



Page 8 of 15 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0009 Replacing version dated / version: 22.02.2019 / 0008 Valid from: 01.11.2021 PDF print date: 01.11.2021 Deck-Harz

Protect from direct sunlight. Keep away from heat. Protect from frost. Protect from humidity.

œ

10.5 Incompatible materials

See also section 7. Avoid contact with strong alkalis. Avoid contact with strong oxidizing agents. Avoid contact with strong acids.

10.6 Hazardous decomposition products

See also section 5.2 No decomposition when used as directed.

SECTION 11: Toxicological information

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

Possibly more information on health effects, see Section 2.1 (classification). Deck-Harz Organism **Toxicity / effect** Endpoint Value Unit 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.

2-hydroxyethyl methacrylate						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	5050	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>3000	mg/kg	Rabbit		
Serious eye damage/irritation:				Rabbit	(Draize-Test)	Eye Irrit. 2
Respiratory or skin				Guinea pig		Skin Sens. 1
sensitisation:						
Symptoms:						breathing
						difficulties,
						coughing,
						mucous
						membrane
						irritation

exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate							
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes	
Acute toxicity, by oral route:	LD50	4350	mg/kg	Rat			
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit			
Respiratory or skin				Mouse	OECD 429 (Skin	Skin Sens. 1B	
sensitisation:					Sensitisation - Local		
					Lymph Node Assay)		
Germ cell mutagenicity:					OECD 471 (Bacterial	Negative	
					Reverse Mutation Test)	_	
Germ cell mutagenicity:					OECD 476 (In Vitro	Negative	
					Mammalian Cell Gene	_	
					Mutation Test)		



- GB						
Page 9 of 15 Safety data sheet according to F Revision date / version: 01.11.20 Replacing version dated / version Valid from: 01.11.2021 PDF print date: 01.11.2021	021 / 0009		S, Annex II			
Deck-Harz						
Germ cell mutagenicity:					OECD 487 (In Vitro Mammalian Cell Micronucleus Test)	Negative
Aspiration hazard:						No
[3-(2,3-epoxypropoxy)propyl]t		ne				
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	8025	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by inhalation:	LC50	>5,3	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Aerosol
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Dam. 1
Respiratory or skin sensitisation:				Human being		No (skin contact)
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:				Rat	OECD 487 (In Vitro Mammalian Cell Micronucleus Test)	Negative
Germ cell mutagenicity:				Rabbit	in vivo	Negative
Carcinogenicity:	NOAEL	>11,1	mg/kg	Mouse		Negative
Reproductive toxicity (Developmental toxicity):	NOAEL	>=400	mg/kg bw/d	Rabbit	OECD 414 (Prenatal Developmental Toxicity Study)	No indications of such an effect.
Reproductive toxicity (Effects on fertility):	NOAEL	500	mg/kg	Rat	OECD 415 (One- Generation Reproduction Toxicity Study)	No indications of such an effect.
Symptoms:						acidosis, drop in blood pressure, vomiting, headaches, cramps, dizziness, visual disturbances, nausea

11.2. Information on other hazards

Deck-Harz						
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.

SECTION 12: Ecological information

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

Deck-Harz							
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:							



B Page 10 of 15

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0009 Replacing version dated / version: 22.02.2019 / 0008 Valid from: 01.11.2021 PDF print date: 01.11.2021 Deck-Harz

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
12.1. Toxicity to fish:	LC50	96h	227	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	380	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	24,1	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	345	mg/l	Selenastrum capricornutum	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	84	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		0,47			OECD 107 (Partition Coefficient (n- octanol/water) - Shake Flask Method)	Bioaccumulation is unlikely (LogPow < 1).
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC20	16h	>3000	mg/l	Pseudomonas fluorescens		

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	0,704	mg/l	Brachydanio rerio	OECD 203 (Fish,	
						Acute Toxicity	
						Test)	
12.1. Toxicity to algae:	EC50	72h	1,98	mg/l	Pseudokirchneriell	OECD 201 (Alga,	
					a subcapitata	Growth Inhibition	
						Test)	
12.2. Persistence and		28d	57	%		OECD 310	Not readily
degradability:						(Ready	biodegradable
						Biodegradability -	
						CO2 in sealed	
						vessels	
						(Headspace Test))	



Page 11 of 15 Safety data sheet accordir Revision date / version: 0' Replacing version dated / Valid from: 01.11.2021 PDF print date: 01.11.202	1.11.2021 / 0009 version: 22.02.20			inex II			
Deck-Harz	1						
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,092	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
[3-(2,3-epoxypropoxy)pr	onviltrimethoxy	eilano					
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	55	mg/l	Cyprinus carpio	Regulation (EC) 440/2008 C.1 (ACUTE TOXICITY FOR FISH)	
12.2. Persistence and degradability:			6,5	h			Half-life pH = 7, 24.5 °C
hydrolysis 12.2. Persistence and degradability:			0,15	h			Half-life pH = 5, 24.5 °C
hydrolysis 12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
12.1. Toxicity to algae:	EC50	96h	350	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:			0,13	h			Half-life pH = 9, 24.5 °C
hydrolysis		24	. 100				
Toxicity to bacteria:	NOEC/NOEL	3h	> 100	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:

æ

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)

08 04 09 waste adhesives and sealants containing organic solvents or other hazardous substances

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

E.g. dispose at suitable refuse site.

E.g. suitable incineration plant.

For contaminated packing material

Pay attention to local and national official regulations.

Empty container completely.

Uncontaminated packaging can be recycled.

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

15 01 10 packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

General statements 14.1. UN number or ID number: Transport by road/by rail (ADR/RID)

3082



(B)		
Page 12 of 15		
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II		
Revision date / version: 01.11.2021 / 0009		
Replacing version dated / version: 22.02.2019 / 0008		
Valid from: 01.11.2021		
PDF print date: 01.11.2021		
Deck-Harz		
14.2. UN proper shipping name:		
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID	, N.O.S. (EXO-1,7,7-TRIMETHYLBICYCLO[2.2.1]HEPT-2-	
YL-ACETATE)		,allh,
14.3. Transport hazard class(es):	9	3
14.4. Packing group:		- W
Classification code:	M6	
LQ:	5 L	\sim
14.5. Environmental hazards:	environmentally hazardous	
Tunnel restriction code:	-	
Transport by sea (IMDG-code)		
14.2. UN proper shipping name:		
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (E	XO-1,7,7-TRIMETHYLBICYCLO[2.2.1]HEPT-2-YL-	
ACETATE)		ፈበኩ
14.3. Transport hazard class(es):	9	
14.4. Packing group:	III	- Av
EmS:	F-A, S-F	< <u>¥</u> _>
Marine Pollutant:	Yes	\sim
14.5. Environmental hazards:	environmentally hazardous	
Transport by air (IATA)		
14.2. UN proper shipping name:		
Environmentally hazardous substance, liquid, n.o.s. (EXO-1,7,7-TRIME	THYI BICYCLOI2 2 11HEPT-2-YL-ACETATE)	ሐ
14.3. Transport hazard class(es):	9	ann
14.4. Packing group:	Ĩ	×~
14.5. Environmental hazards:	environmentally hazardous	⋌⋕₂⋋
14.6. Special precautions for user	environmentally nazaraodo	\sim
Persons employed in transporting dangerous goods must be trained.		
All persons involved in transporting must observe safety regulations.		
Precautions must be taken to prevent damage.	• • •	
14.7. Maritime transport in bulk according to IMO		
Freighted as packaged goods rather than in bulk, therefore not applicable	le.	
Minimum amount regulations have not been taken into account.		
Danger code and packing code on request.		
Comply with special provisions.		
SECTION 15: Reg	ulatory 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 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be considered according to storage, handling etc.):

according to storage, nandling etc.			
Hazard categories	Notes to Annex I	Qualifying quantity (tonnes) of	Qualifying quantity (tonnes) of
		dangerous substances as	dangerous substances as
		referred to in Article 3(10) for the	referred to in Article 3(10) for the
		application of - Lower-tier	application of - Upper-tier
		requirements	requirements
E1		100	200

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2010/75/EU (VOC):

0 %

Observe incident regulations.

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information



Page 13 of 15

ആ

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0009 Replacing version dated / version: 22.02.2019 / 0008 Valid from: 01.11.2021 PDF print date: 01.11.2021 Deck-Harz

Revised sections: 1-16 Employee training in handling dangerous goods is required. 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
Eye Irrit. 2, H319	Classification according to calculation procedure.
STOT SE 3, H335	Classification according to calculation procedure.
Skin Irrit. 2, H315	Classification according to calculation procedure.
Skin Sens. 1, H317	Classification according to calculation procedure.
Aquatic Acute 1, H400	Classification according to calculation procedure.
Aquatic Chronic 1, H410	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.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation. H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Eye Irrit. — Eye irritation STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation Skin Irrit. — Skin irritation Skin Sens. — Skin sensitization Aquatic Acute — Hazardous to the aquatic environment - acute Aquatic Chronic — Hazardous to the aquatic environment - chronic

Eye Dam. — Serious eye damage

Key literature references and sources for data:

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

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

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

Safety data sheets for the constituent substances.

ECHA Homepage - Information about chemicals.

GESTIS Substance Database (Germany).

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

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

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

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

Any abbreviations and acronyms used in this document:

acc., acc. to according, according to ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road) AOX Adsorbable organic halogen compounds approx. approximately Art., Art. no. Article number



œ Page 14 of 15 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0009 Replacing version dated / version: 22.02.2019 / 0008 Valid from: 01.11.2021 PDF print date: 01.11.2021 Deck-Harz ASTM ASTM International (American Society for Testing and Materials) ATE Acute Toxicity Estimate BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany) BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany) BCF **Bioconcentration factor** BSEF The International Bromine Council bw body weight CAS **Chemical Abstracts Service** Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances CLP and mixtures) CMR carcinogenic, mutagenic, reproductive toxic DMEL Derived Minimum Effect Level DNEL Derived No Effect Level DOC Dissolved organic carbon dw dry weight for example (abbreviation of Latin 'exempli gratia'), for instance e.g. 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 European Inventory of Existing Commercial Chemical Substances EINECS ELINCS European List of Notified Chemical Substances FN 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 European Union EU EVAL Ethylene-vinyl alcohol copolymer Fax. Fax number gen. general Globally Harmonized System of Classification and Labelling of Chemicals GHS GWP Global warming potential Koc Adsorption coefficient of organic carbon in the soil Kow octanol-water partition coefficient IARC International Agency for Research on Cancer IATA International Air Transport Association 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) 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 not applicable n.a. not available n.av. not checked n.c. n.d.a. no data available NIOSH National Institute for Occupational Safety and Health (USA) NLP No-longer-Polymer NOEC, NOEL No Observed Effect Concentration/Level OECD Organisation for Economic Co-operation and Development organic ora. OSHA Occupational Safety and Health Administration (USA) PBT persistent, bioaccumulative and toxic ΡE Polyethylene PNEC Predicted No Effect Concentration parts per million ppm PVC Polyvinylchloride



Page 15 of 15 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0009 Replacing version dated / version: 22.02.2019 / 0008 Valid from: 01.11.2021 PDF print date: 01.11.2021 Deck-Harz

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 Telephone Tel. Total organic carbon TOC UN RTDG United Nations Recommendations on the Transport of Dangerous Goods VOC Volatile organic compounds vPvB very persistent and very bioaccumulative wwt wet weight The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility. These statements were made by:

ആ

Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

© by Chemical Check GmbH Gefahrstoffberatung. The copying or changing of this document is forbidden except with consent of the Chemical Check GmbH Gefahrstoffberatung.