

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.08.2017 / 0001

Revision date / version: 14.08.2017 / 0001 Replacing version dated / version: 14.08.2017 / 0001 Valid from: 14.08.2017 PDF print date: 14.08.2017 Marine Sealant 2K MS-3000/60 V2 - Komp. B

Art.-Nr. 3039

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

Marine Sealant 2K MS-3000/60 V2 - Komp. B Art.-Nr. 3039

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

Relevant identified uses of the substance or mixture:

Adhesive Sector of use [SU]: SU2: Public domain (administration, education, entertainment, services, craftsmen)

Uses advised against:

No information available at present

1.3 Details of the supplier of the safety data sheet

(GB)

Pantera Product GmbH, Südring 22, 21465 Wentorf b. Hamburg, Germany Phone:+49 (0) 40 72911000, Fax:+49 (0) 40 72911009

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:

49 551 19240 (D-37075, Göttingen, 24 hour)

Telephone number of the company in case of emergencies:

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

H319-Causes serious eye irritation. H317-May cause an allergic skin reaction. Eye Irrit. Skin Sens.

2.2 Label elements

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



Warning

H319-Causes serious eye irritation. H317-May cause an allergic skin reaction.

P280-Wear protective gloves and eye protection / face protection. P314-Get medical advice / attention if you feel unwell.

Fatty acids, C18-unsatd., trimers, compds. with oleyl amine

Fatty acids, tall-oil, compds. with oleylamine

2.3 Other hazards

2.3 Other Indizards
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

3.2 Mixture

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	
Registration number (REACH)	01-2119513212-58-XXXX
Index	
EINECS, ELINCS, NLP	219-784-2
CAS	2530-83-8
content %	1-2,5
Classification according to Regulation (EC) 1272/2008	Eye Dam. 1, H318
(CLP)	

Fatty acids, C18-unsatd., trimers, compd	s. with oleyl
Registration number (REACH)	***

Index	
EINECS, ELINCS, NLP	604-612-4 (REACH-IT List-No.)
CAS	147900-93-4
content %	0,1-<1
Classification according to Regulation (EC) 1272/2008	Acute Tox. 4, H302
(CLP)	Skin Sens. 1, H317
	STOT RE 2, H373
	Amustia Chassis 2 11444

Fatty acids, tall-oil, compds. with oleylamine	
Registration number (REACH)	01-2119974148-28-XXXX
Index	
EINECS, ELINCS, NLP	288-315-1
CAS	85711-55-3
content %	0,1-<1
Classification according to Regulation (EC) 1272/2008	Skin Sens. 1A, H317
(CLP)	Eye Dam. 1, H318
	STOT RE 2. H373

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 3.1/3.2 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 tak account.

SECTION 4: First aid measures

4.1 Description of first aid measures

pour anything into the mouth of an unconscious person!

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. Unsuitable cleaning product: Solvent

Thinners

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. 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 **SECTION 5: Firefighting measures**

5.1 Extinguishing media

Suitable extinguishing media

CO2

Extinction powde

Water jet spray / alcohol resistant foam

Unsuitable extinguishing media

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop

Oxides of carbon Oxides of nitrogen

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

Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure sufficient supply of air.
Avoid contact with eyes or skin.
If applicable, caution - risk of slipping

6.2 Environmental precautions

It 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, diato

ous earth, sawdust) and dispose of according to Section 13.

Pick up mechanically 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 contact with eyes.

Avoid long lasting or intensive contact with 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.



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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.

Store cool. Store in a dry place

7.3 Specific end use(s)

Adhesive

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

The methanol listed below can arise upon contact with water.

| Comparison of the methanol | Comparison Content WEL-TWA: 200 ppm (266 mg/m3) (WEL), 200 ppm (260 mg/m3) (EU) Monitoring procedures: WEL-STEL: 250 ppm (333 mg/m3 (WEL)

Compur - KITA-119 SA (549 640)

Compur - KITA-119 U (549 657)

Draeger - Alcohol 25/a Methanol (81 01 631) DFG (D) (Loesungsmittelgemische 6), DFG (E) (Solvent mixtures 6) - 1998, 2002 - EU project BC/CEN/ENTR/000/2002-16 card 65-1 (2004) Draeger - Alcohol 100/a (CH 29 701)
Other information: Sk (WEL, EU) BMGV: ---GB Chemical Name Calcium carbonate Content WEL-TWA: 4 mg/m3 (respirable dust), WEL-STEL: 10 mg/m3 (total inhalable dust) Monitoring procedures:
BMGV: ---Other information: ---(GB) Chemical Name Diisononyl phthalate Content WEL-TWA: 5 mg/m3 WEL-STEL: Monitoring procedures: BMGV: ---

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 (2017/164/EU). (9) = Respirable fraction (2017/164/EU). [WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).

(8) = Inhalable fraction (2017/164/EU), (9) = Respirable fraction (2017/164/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.

Other information:

the goal of revision.

[3-(2.3-epoxypropoxy)propyl]trimethoxysilane

Area of application	Exposure route / Environmental compartment	Effect on health	Descri ptor	Valu e	Unit	Note
	Environment - freshwater		PNEC	1	mg/l	
	Environment - marine		PNEC	0,1	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	1	mg/l	
	Environment - sediment		PNEC	0,79	mg/kg dry weight	
	Environment - soil		PNEC	0,13	mg/kg dry weight	
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	12,5	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	12,5	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	43,5	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	147	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	21	mg/kg bw/day	

Methanol						
Area of application	Exposure route / Environmental compartment	Effect on health	Descri ptor	Valu e	Unit	Note
	Environment - freshwater		PNEC	154	mg/l	
	Environment - marine		PNEC	15,4	mg/l	
	Environment - sediment, freshwater		PNEC	570, 4	mg/kg	
	Environment - sediment, marine		PNEC	57,0 4	mg/kg	
	Environment - soil		PNEC	23,5	mg/kg	
	Environment - water, sporadic (intermittent) release		PNEC	154 0	mg/l	

	Environment - sewage treatment plant		PNEC	100	mg/l	
	Environment - freshwater		PNEC	20,8	mg/l	
	Environment - marine		PNEC	2,08	mg/l	-
	Environment - sediment		PNEC	77	mg/kg	
	Environment - sediment		PNEC	7,7	mg/kg	
Consumer	Human - inhalation	Long term, local effects	DNEL	50	mg/m3	
Consumer	Human - dermal	Short term, systemic effects	DNEL	8	mg/kg body weight/ day	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	50	mg/m3	
Consumer	Human - oral	Short term, systemic effects	DNEL	8	mg/kg body weight/ day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	8	mg/kg body weight/ day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	50	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	8	mg/kg body weight/ day	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	40	mg/kg body weight/ day	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	260	mg/m3	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	260	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	40	mg/kg body weight/ day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	260	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	260	mg/m3	_

Calcium carbonate						
Area of application	Exposure route /	Effect on	Descri	Valu	Unit	Note
	Environmental	health	ptor	е		
	compartment					
	Environment -		PNEC	100	mg/l	
	sewage treatment					
	plant					
Consumer	Human - inhalation	Long term,	DNEL	10	mg/m3	
		systemic effects				
Consumer	Human - inhalation	Long term,	DNEL	1,06	mg/m3	
		local effects				
Workers /	Human - inhalation	Long term,	DNEL	10	mg/m3	
employees		systemic effects				
Workers /	Human - inhalation	Long term,	DNEL	4,26	mg/m3	
employees		local effects				

Diisononyl phthalate						
Area of application	Exposure route / Environmental compartment	Effect on health	Descri ptor	Valu e	Unit	Note
	Environment - soil		PNEC	30	mg/kg	
	Environment - oral (animal feed)		PNEC	150	mg/kg	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	15,3	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	51,7 2	mg/m3	

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction. If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques. These are specified by e.g. EN 14042. EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents'

8.2.2 Individual protection measures, such as personal protective equipment General hygiene measures for the handling of chemicals are applicable. Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs

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

Eye/face protection: Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:

Chemical resistant protective gloves (EN 374).

Recommended
Protective nitrile gloves (EN 374)
Minimum layer thickness in mm:

>= 0,35 Permeation time (penetration time) in minutes:

The breakthrough times determined in accordance with EN 374 Part 3 were not obtained under practical

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

Protective hand cream recommended.

Skin protection - Other:

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



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Respiratory protection: Normally not necessary.

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.

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.

varies from manufacturer to manufacturer.

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

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: Pastelike, Liquid
Colour: Grey Pastelike, Liquid Grey Characteristic Odour: Odour threshold: Not determined pH-value:
Melting point/freezing point:
Initial boiling point and boiling range: Not determined Not determined Not determined Flash point: Not determined Evaporation rate: Not determined Evaporation rate: Flammability (solid, gas): Lower explosive limit: Upper explosive limit: Vapour pressure: Vapour density (air = 1): Not determined Not determined Not determined Not determined Not determined Density: Bulk density: 1,61 g/cm3 n.a. Not determined Insoluble Not determined Solubility(ies):
Water solubility:
Partition coefficient (n-octanol/water):

Auto-ignition temperature: n.a. Not determined Decomposition temperature: 45000 mPas (25°C) Product is not explosive. No Viscosity:

Explosive properties: Oxidising properties:

9.2 Other information

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

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

10.4 Conditions to avoid Strong heat

10.5 Incompatible materials

10.6 Hazardous decomposition products

In case of contact with water Methanol

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

Marine Sealant 2K MS-3000/60 V2 - Komp. B

Toxicity / effect	Endpo int	Value	Unit	Organis m	Test method	Notes
Acute toxicity, by oral						n.d.a.
route:						
Acute toxicity, by						n.d.a.
dermal route:						
Acute toxicity, by						n.d.a.
inhalation:						
Skin						n.d.a.
corrosion/irritation:						
Serious eye						n.d.a.
damage/irritation:						
Respiratory or skin						n.d.a.
sensitisation:						
Germ cell						n.d.a.
mutagenicity:						
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ						n.d.a.
toxicity - single						
exposure (STOT-SE):						
Specific target organ						n.d.a.
toxicity - repeated						1
exposure (STOT-RE):						1
Aspiration hazard:						n.d.a.

Symptoms:						n.d.a.
[3-(2,3-epoxypropoxy)p	ropylltrime	thovycilano				
[3-(2,3-epoxypropoxy)p Toxicity / effect	Endpo	Value	Unit	Organis	Test method	Notes
Toxiony / cricot	int	value	0	m	restilication	110103
Acute toxicity, by oral	LD50	8025	mg/k	Rat	OECD 401	
route:			g		(Acute Oral	
			"		Toxicity)	
Acute toxicity, by	LD50	>2000	mg/k	Rabbit	OECD 402	
dermal route:			g		(Acute Dermal	
			"		Toxicity)	
Acute toxicity, by	LC50	5,3	mg/l	Rat	OECD 403	Aerosol
inhalation:			1 -		(Acute Inhalation	
					Toxicity)	
Skin				Rabbit	OECD 404	Not irritan
corrosion/irritation:					(Acute Dermal	
					Irritation/Corrosio	
					n)	
Serious eye		-		Rabbit	OECD 405	Risk of
damage/irritation:					(Acute Eye	serious
					Irritation/Corrosio	damage to
					n)	eyes.
Respiratory or skin				Guinea	OECD 406 (Skin	Negative
sensitisation:				pig	Sensitisation)	
Carcinogenicity:	NOAE	4500	A-			Negative
Reproductive toxicity:	NOAE L	1500	mg/k g/d			
Aspiration hazard:			g/u			No
Symptoms:						acidosis,
.,						drop in
						blood
						pressure,
						vomiting,
						headache
						cramps,
						dizziness,
						visual
						disturband
						s, nausea
Specific target organ	NOAE	500	mg/k	Rat	OECD 407	
toxicity - repeated	L		g		(Repeated Dose	
exposure (STOT-RE),					28-Day Oral	
oral:					Toxicity Study in	
Specific target organ	NOAE	0,225	mg/k	Rat	Rodents) OECD 412	
Specific target organ toxicity - repeated	L	0,225		rtal	(Subacute	
exposure (STOT-RE),	-		g		Inhalation	
exposure (STOT-RE), inhalat.:			1		Toxicity - 28-Day	

Toxicity / effect	Endpo int	Value	Unit	Organis m	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/k g	Rat	OECD 423 (Acute Oral Toxicity - Acute Toxic Class Method)	
Skin corrosion/irritation:					OECD 439 (In Vitro Skin Irritation - Reconstructed Human Epidermis Test Method)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosio n)	Risk of serious damage to eyes.
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Yes (skin contact)
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAE L	7,1	mg/k g bw/d	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/De velopm. Tox. Screening Test)	Analogous conclusion

Toxicity / effect	Endpo	Value	Unit	Organis m	Test method	Notes
Acute toxicity, by oral route:	ATE	300	mg/k g	Human being		Experience s on persons.
Acute toxicity, by dermal route:	LD50	17100	mg/k g	Rabbit		Does not conform with EU classificatio n.
Acute toxicity, by inhalation:	LC50	85	mg/l/ 4h	Rat		Not relevant for classificatio n., Vapours
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosio n)	Mild irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Not sensitizisin g
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative



Not irritant

Not sensitizisin g No

indications of such an effect.

indications

of such an

indications

of such an

indications of such an

effect. diarrhoea

nausea and

vomiting.

Notes

n.d.a

n.d.a

n.d.a

n.d.a.

n.d.a

n.d.a.

n.d.a

n.d.a.

Notes

Not readily

biodegrada

Not readily

biodegrada

expected

effect.

effect.

(SB)
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Revision date / version: 14.08.2017 / 0001 OECD 405 Rabbit Serious eye damage/irritation: (Acute Eye Irritation/Corrosio Revision date / version: 14.08.2017 / 0001 Replacing version dated / version: 14.08.2017 / 0001 Valid from: 14.08.2017 PDF print date: 14.08.2017 Marine Sealant 2K MS-3000/60 V2 - Komp. B Art.-Nr. 3039 Germ cell Mammal mutagenicity: Symptoms abdominal pain, vomiting, Carcinogenicity: headaches, gastrointes tinal disturbance Reproductive toxicity drowsiness visual disturbance Specific target organ s, watering eyes, toxicity - single exposure (STOT-SE): nausea, Symptoms: mental confusion Calcium carbonat Toxicity / effect Endpo Organis Test method Notes int LD50 m Rat **SECTION 12: Ecological information** OECD 420 >2000 Acute toxicity, by oral mg/l (Acute Oral toxicity - Fixe
Dose Procedure)
OECD 402 Possibly more information on environmental effects, see Section 2.1 (classification)

Marine Sealant 2K MS-3000/60 V2 - Komp. B Acute toxicity, by LD50 >2000 mg Art.-Nr. 3039 Toxicity / effec (Acute Dermal dermal route: g Organism Toxicity) OECD 403 method Acute toxicity, by LC50 >3 mg/l 4h Rat 12.1. Toxicity to (Acute Inhalation Toxicity) OECD 404 fish: 12.1. Toxicity to Skin Rabbit Not irritant corrosion/irritation: (Acute Dermal Irritation/Corrosio daphnia: 12.1. Toxicity to algae: 12.2. n) OFCD 405 Serious eye damage/irritation: Rabbi Not irritant Persistence and (Acute Eye Irritation/Corrosio degradability: n) OECD 429 (Skin Bioaccumulative Respiratory or skin sensitisation: Mouse Not Sensitisation Local Lymph nsitizisin potential: 12.4. Mobility in soil: 12.5. Results of Node Assay) OECD 471 Germ cell Negative mutagenicity: (Bacterial Reverse assessment 12.6. Other Mutation Test)
OECD 473 (In Vitro adverse effects Negative mutagenicity Mammalian Unit Organism Test Chromosome Aberration Test) OECD 476 (In method **e** 55 Regulation (EC) 440/2008 C.1 (ACUTE TOXICITY 12.1. Toxicity to LC50 Germ cell mutagenicity: Negative 96h mg/ Brachydanio Vitro Mammalian Cell Gene Mutation Test) Carcinogenicity FOR FISH)
Regulation
(EC)
440/2008 indications of such an 12.1. Toxicity to LC0 961 30 mg/l Cyprinus caprio effect. NOEL 1000 Rat OECD 422 Reproductive toxicity: mg/k C.1 (ACUTE TOXICITY (Combined Repeated Dose g bw/d Tox. Study with the Reproduction/De FOR FISH) OECD 202 (Daphnia 12.1. Toxicity to daphnia: NOEC/N OEL 21d mg/ Daphnia magna velopm. Tox. Screening Test) sp. Acute Immobilisati Specific target organ on Test) U.S. EPA ECOTOX toxicity - single exposure (STOT-SE): indications 12.1. Toxicity to daphnia: EC50 48h 324 mg/l Daphnia magna of such an effect. Specific target organ Database U.S. EPA 12.1. Toxicity to EC50 7d toxicity - repeated exposure (STOT-RE): 119 mg/l Anabaena indications of such an effect. algae: flos-aquae **ECOTOX** Database 12.1. Toxicity to NOEC/N 7d <50 Anabaena flos-aquae Aspiration hazard mg/ ECOTOX Database algae: indications of such an 12.2. 28d 37 % activated Regulation (EC) Persistence and sludge Rat OECD 422 degradability: 440/2008 Specific target organ 1000 mg/ C.4-A (DETERMIN ATION OF 'READY' (Combined Repeated Dose Tox. Study with toxicity - repeated exposure (STOT-RE), g bw/d Reproduction/De velopm. Tox. Screening Test) OECD 413 BIODEGRA DABILITY DOC DIE-AWAY Specific target organ NOAE 0,212 Rat mg/ TEST)
Regulation
(EC)
440/2008
C.4-A
(DETERMIN
ATION OF toxicity - repeated exposure (STOT-RE), inhalat.: (Subchronic Inhalation DOC 28d 12.2 37 % Toxicity - 90-Day Study) Persistence and degradability: Diisononyl phthalate Toxicity / effect Value Endpo Unit Organis Test method Notes 'READY int LD50 m Rat OECD 401 BIODEGRA Acute toxicity, by oral >10000 mg/l DABILITY DOC DIE-AWAY q (Acute Oral Toxicity) LD50 Rabbit Acute toxicity, by >3160 mg/l dermal route: Acute toxicity, by TEST) g mg/l 4h Log Pow 0.5 LC50 Rat 12.3. Bioaccumulative inhalation: Skin OECD 404 potential: 12.3. Rabbit Not irritant corrosion/irritation: (Acute Dermal Irritation/Corrosio

Bioaccumulative

potential:



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Sarety data sneet a				1907/2006	6, Annex II			Toxicity to bacteria:	OEL NOEC/N	3n	100	mg/l	activated sludge	(Activated	
Revision date / vers Replacing version of				01										Sludge, Respiration	
Valid from: 14.08.2 PDF print date: 14.	017													Inhibition Test	
Marine Sealant 2K		/2 - Kom	р. В											(Carbon	
ArtNr. 3039														and Ammonium	
12.5. Results of PBT and vPvB							No PBT substance,	Other organisms:	EC50	21d	>10	mg/k		Oxidation)) OECD 208	Glycine
assessment							No vPvB	Other organisms.	2000	210	00	g dw		(Terrestrial	max
Toxicity to	NOEC/N	3h	>10	mg/l	activated	OECD 209	substance							Plants, Growth	
bacteria:	OEL		0		sludge	(Activated Sludge,		Other organisms:	EC50	21d	>10	mg/k		Test) OECD 208	Lycopersic
						Respiration Inhibition		a man angamaman			00	g dw		(Terrestrial Plants,	on
						Test								Growth	esculentum
						(Carbon and		Other organisms:	EC50	21d	>10	mg/k		Test) OECD 208	Avena
						Ammonium Oxidation))					00	g dw		(Terrestrial Plants,	sativa
Mathanal						Oziladilorijj								Growth	
Methanol Toxicity / effect	Endpoin	Tim	Valu	Unit	Organism	Test	Notes	Other organisms:	NOEC/N	21d	100	mg/k		Test) OECD 208	Glycine
12.1. Toxicity to	t LC50	e 96h	e 154	mg/l	Lepomis	method			OEL		0	g dw		(Terrestrial Plants,	max
fish: 12.1. Toxicity to	EC50	48h	00 >10	mg/l	macrochirus Daphnia									Growth Test)	
daphnia:	2030		000		magna			Other organisms:	NOEC/N	21d	100	mg/k		OECD 208	Lycopersic
12.2. Persistence and		28d	99	%		OECD 301 D (Ready	Readily biodegrada		OEL		0	g dw		(Terrestrial Plants,	on esculentum
degradability:						Biodegradab ility - Closed	ble							Growth Test)	
10.0	DOE		00.4		Ohlassila	Bottle Test)		Other organisms:	NOEC/N OEL	21d	100	mg/k		OECD 208 (Terrestrial	Avena
12.3. Bioaccumulative	BCF		284 00		Chlorella vulgaris				OEL		0	g dw		Plants,	sativa
potential: Other	DOC		<70	%										Growth Test)	
information: Other	BOD		>60	%				Other organisms:	NOEC/N OEL	21d	100	mg/k g dw		OECD 208 (Terrestrial	Glycine max
information:	ВОВ		700	76					OLL			gun		Plants,	mux
Calcium carbonat	te													Growth Test)	
Toxicity / effect	Endpoin	Tim e	Valu e	Unit	Organism	Test method	Notes	Other organisms:	NOEC/N OEL	21d	100	mg/k g dw		OECD 208 (Terrestrial	Lycopersic on
12.1. Toxicity to	LC50	96h			Oncorhynch	OECD 203	No							Plants, Growth	esculentum
fish:					us mykiss	(Fish, Acute Toxicity	observation with							Test)	
						Test)	saturated solution of	Other organisms:	NOEC/N OEL	21d	100	mg/k g dw		OECD 208 (Terrestrial	Avena sativa
							test material.							Plants, Growth	
12.1. Toxicity to	EC50	48h			Daphnia	OECD 202	No	Other ergeriame	EC50	14d	. 10		Finania	Test) OECD 207	
daphnia:					magna	(Daphnia sp. Acute	observation with	Other organisms:	ECSU	140	>10 00	mg/k g dw	Eisenia foetida	(Earthworm,	
						Immobilisati on Test)	saturated solution of							Acute Toxicity	
						011 1 001)	test	Other organisms:	NOEC/N	14d	100	mg/k	Eisenia	Tests) OECD 207	
12.1. Toxicity to	EC50	72h	>14	mg/l	Desmodesm	OECD 201	material.	Other Organisms.	OEL	140	0	g dw	foetida	(Earthworm,	
algae:					us subspicatus	(Alga, Growth								Acute Toxicity	
						Inhibition Test)		Other organisms:	EC50	28d	>10	mg/k		Tests) OECD 216	
12.1. Toxicity to	NOEC/N	72h	14	mg/l	Desmodesm	OECD 201		J. T. J. J.			00	g dw		(Soil Microorganis	
algae:	OEL				us subspicatus	(Alga, Growth								ms -	
						Inhibition Test)								Nitrogen Transformati	
12.2. Persistence and						,	Not relevant	Other organisms:	NOEC/N	28d	100	mg/k		on Test) OECD 216	
degradability:							for	a man angamaman	OEL		0	g dw		(Soil Microorganis	
							inorganic substances							ms -	
12.3.							Not to be							Nitrogen Transformati	
Bioaccumulative potential:							expected	Water solubility:			0,01	g/l		on Test) OECD 105	
12.4. Mobility in							n.a.				66	9.		(Water	
soil: 12.5. Results of							No PBT	Water solubility:			0,01	g/l		Solubility) OECD 105	20°C
PBT and vPvB assessment							substance, No vPvB				66			(Water Solubility)	
	EC50	3h	>10	ma/l	activated	OECD 209	substance	Diisononyl phthal	ate				•	*	•
Toxicity to bacteria:	ECSU	311	>10 00	mg/l	sludge	(Activated		Toxicity / effect	Endpoin	Tim	Valu	Unit	Organism	Test	Notes
						Sludge, Respiration		12.1. Toxicity to	LC50	e 96h	e >10	mg/l	Brachydanio	method 92/69/EC	
						Inhibition Test		fish: 12.1. Toxicity to	EC50	48h	>74	mg/l	rerio Daphnia	92/69/EC	
						(Carbon		daphnia:					magna		
						and Ammonium		12.1. Toxicity to daphnia:	NOEC/N OEL	21d	>10 1	mg/l	Daphnia magna	OECD 202 (Daphnia	
Toxicity to	NOEC/N	3h	100	mg/l	activated	Oxidation)) OECD 209								sp. Acute Immobilisati	
bacteria:	OEL		0	_	sludge	(Activated Sludge,		12.1. Toxicity to	NOEC/N	72h	88	mg/l	Scenedesm	on Test)	
						Respiration		algae:	OEL				us subspicatus		
						Inhibition Test		12.1. Toxicity to	EC50	72h	>88	mg/l	Scenedesm	84/449/EEC	
						(Carbon and		algae:					us subspicatus	C.3	
						Ammonium Oxidation))		12.2. Persistence and		28d	81	%	activated sludge	Regulation (EC)	Readily biodegrada
Toxicity to	EC50	3h	>10	mg/l	activated	OECD 209		degradability:					Siddyc	440/2008	ble
			00		sludge	(Activated Sludge,								C.4-C (DETERMIN	
bacteria:						Respiration Inhibition								ATION OF 'READY'	
bacteria:			1						i .						1
bacteria:						Test								BIODEGRA	
bacteria:						Test (Carbon and								BIODEGRA DABILITY - CO2	
bacteria:						Test (Carbon								BIODEGRA DABILITY -	



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12.3. Bioaccumulative potential:	Log Pow		9,37 -10, 7				calculated value
12.3. Bioaccumulative potential:	BCF	14d	<3				Analogous conclusion
12.4. Mobility in soil:	Koc		>50 00				
12.4. Mobility in soil:	H (Henry)		0,00 000 149	atm* m3/m ol			
Toxicity to bacteria:	EC20	3h	>83	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Other organisms:	NOEC/N OEL	56d	>98 2,4	mg/k g	Eisenia foetida		
Other organisms:	LC50	14d	>73 72	mg/k g	Eisenia foetida	OECD 207 (Earthworm, Acute Toxicity Tests)	

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

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. suitable incineration plant.

E.g. dispose at suitable refuse site

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 Transport by road/by rail (ADR/RID) 14.2. UN proper shipping name: 14.3. Transport hazard class(es): 14.4. Packing group: Classification code:

n.a. n.a. n.a. LQ: 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): 14.4. Packing group:

Marine Pollutant: 14.5. Environmental hazards Not applicable

Transport by air (IATA)

14.2. UN proper shipping name: 14.3. Transport hazard class(es): n.a. n.a. n.a. Not applicable 14.4. Packing group: 14.5. Environmental hazards

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

Comply with national regulations/laws governing maternity protection and the protection of young people at work!

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

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
Eye Irrit. 2, H319	Classification according to calculation
	procedure.
Skin Sens. 1, H317	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.

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction

H318 Causes earious eye damage.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

Eve Irrit. - Eve irritation Eye Init. — Eye Initiation
Skin Sens. — Skin sensitization
Eye Dam. — Serious eye damage
Acute Tox. — Acute toxicity - oral
STOT RE — Specific target organ toxicity - repeated exposure
Aquatic Chronic — Hazardous to the aquatic environment - chronic

Any abbreviations and acronyms used in this document:

Article Categories

Acc, acc. to according, according to
ACGIH American Conference of Governmental Industrial Hygienists
ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (=
European Agreement concerning the International Carriage of Dangerous Goods by Road)

AOFI Acceptable Operator Exposure Level Adsorbable organic halogen compounds approximately

Article number AOX

approx. Art., Art. no

Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)
Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and ATE BAM

Testing, Ge

rmany) Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health BAuA

and Safety, BCF BGV

Germany)
Bioconcentration factor
Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)

Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol) Biological monitoring guidance value (EH40, UK) Biochemical oxygen demand Bromine Science and Environmental Forum BHT BMGV

BOD BSEF

bw CAS body weight Chemical Abstracts Service

CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids

CESIO CIPAC CLP uous Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques Collaborative International Pesticides Analytical Council Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification,

CLP Classification, Labelling and Packaging (NEOC labelling and packaging of substances and mixtures)
CMR carcinogenic, mutagenic, reproductive toxic
COD Chemical oxygen demand
CTFA Cosmetic, Toiletry, and Fragrance Association
DMEL Derived Minimum Effect Level
DNEL Derived No Effect Level

CMR COD CTFA DMEL DNEL DOC DT50

Dissolved organic carbon Dwell Time - 50% reduction of start concentration

Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for d Allied Processes) dry weight for example (abbreviation of Latin 'exempli gratia'), for instance DVS

e.g. EC To example (above autori of Eatin exempli grada), for instance European Community
European Community
European Economic Area
European Economic Community
European Inventory of Existing Commercial Chemical Substances
European List of Notified Chemical Substances ECHA EEA EEC EINECS ELINCS

ΕN European Norms

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

ERC ES Environmental Release Categories Exposure scenario et cetera

etc. EU European Union EWC

European Waste Catalogue Fax number Fax. gen. GHS GWP HET-CAM

general Globally Harmonized System of Classification and Labelling of Chemicals Global warming potential Hen's Egg Test - Chorionallantoic Membrane

HGWP IARC

Hen's Eggl 18st - Onotionaliationic memorane Halocarbon Global Warming Potential International Agency for Research on Cancer International Air Transport Association Intermediate Bulk Container International Bulk Chemical (Code) IATA IBC IBC (Code) IC Inhibitory concentration
IMDG-code International Maritime Code for Dangerous Goods

including, inclusive International Uniform ChemicaL Information Database lethal concentration lethal concentration 50 percent kill

incl. IUCLID LC LC50

LCLo lowest published lethal concentration Lethal Dose, 50% kill
Lethal Dose Low
Lowest Observed Adverse Effect Level

LCLo LD LD50 LDLo LOAEL LOEC Lowest Observed Effect Concentration LOEL Lowest Observed Effect Level

Limited Quantities
International Convention for the Prevention of Marine Pollution from Ships
not applicable LQ MARPOL

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

no data available
National Institute of Occupational Safety and Health (United States of America)
No Observed Adverse Effect Level
No Observed Adverse Effect Level
No Observed Effect Concentration
No Observed Effect Concentration
No Observed Effect Concentration NIOSH NOAEC NOAEL NOEC NOEL

ODP Ozone Depletion Potential Organisation for Economic Co-operation and Development



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org. PAH PBT PC PE organic polycyclic aromatic hydrocarbon persistent, bioaccumulative and toxic Chemical product category

Polyethylene

Projectivente
Predicted No Effect Concentration
Photochemical ozone creation potential
parts per million

PNEC POCP ppm PROC

PTFE Polytetrafluorethylene
REACH Registration, 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 Carriage of Dangerous Goods by Rail)
SADT Self-Accelerating Decomposition Temperature
SAR Structure Activity Relationship
SU Sector of use
SVHC Substances of Very High Concern
Tel. Theoretical pages of activity.

ThOD TOC

Substances or very riight concern
Telephone
Theoretical oxygen demand
Total organic carbon
Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances)
United Nations Recommendations on the Transport of Dangerous Goods
Verordnung über brennbare Füssigkeiten (= Regulation for flammable liquids (Austria))

TRGS UN RTDG

VbF VOC

VOC Volatile organic compounds

VPVB very persistent and very bioaccumulative

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).

WHO World Health Organization

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:
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