

Page 1 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

> 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

4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses of the substance or mixture: Coating
Uses advised against: No information available at present.

## 1.3 Details of the supplier of the safety data sheet

BTI Befestigungstechnik GmbH & Co. KG Salzstr. 51 74653 Ingelfingen Tel.: +49 7940 141 141 Fax: +49 7940 141 9141 Email: info@bti.de Homepage: www.bti.de

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:

----T | |

**Telephone number of the company in case of emergencies:** +49 (0) 700 / 24 112 112 (BRC)

# **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				
Flam. Liq.	3	H226-Flammable liquid and vapour.				
STOT RE	2 H373-May cause damage to organs through prolonged or					
		repeated exposure (organs of hearing).				
Eye Irrit.	2	H319-Causes serious eye irritation.				
Skin Irrit.	2	H315-Causes skin irritation.				



Page 2 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

Asp. Tox. Aquatic Chronic H334-May cause allergy or asthma symptoms or breathing difficulties if inhaled. H304-May be fatal if swallowed and enters airways. H412-Harmful to aquatic life with long lasting effects.

## 2.2 Label elements

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

1

1

3



H226-Flammable liquid and vapour. H373-May cause damage to organs through prolonged or repeated exposure (organs of hearing). H319-Causes serious eye irritation. H315-Causes skin irritation. H334-May cause allergy or asthma symptoms or breathing difficulties if inhaled. H304-May be fatal if swallowed and enters airways. H412-Harmful to aquatic life with long lasting effects.

P210-Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260-Do not breathe vapours or spray. P273-Avoid release to the environment. P280-Wear protective gloves / eye protection / face protection.

P301+P310-IF SWALLOWED: Immediately call a POISON CENTER / doctor. P304+P340-IF INHALED: Remove person to fresh air and keep comfortable for breathing. P314-Get medical advice / attention if you feel unwell. P331-Do NOT induce vomiting.

EUH204-Contains isocyanates. May produce an allergic reaction. EUH211-Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

m-tolylidene diisocyanate 4,5-Dichloro-2-octyl-2H-isothiazol-3-one Reaction mass of ethylbenzene and m-xylene and p-xylene

# 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 Substances**n.a.**3.2 Mixtures** 



Page 3 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

Reaction mass of ethylbenzene and m-xylene and p-	Substance for which an EU exposure limit
xylene	value applies.
<b>Registration number (REACH)</b>	01-2119488216-32-XXXX
Index	
EINECS, ELINCS, NLP	905-562-9 (REACH-IT List-No.)
CAS	
content %	10-<25
Classification according to Regulation (EC) 1272/2008	Flam. Liq. 3, H226
(CLP)	Asp. Tox. 1, H304
	Acute Tox. 4, H312
	Skin Irrit. 2, H315
	Eye Irrit. 2, H319
	Acute Tox. 4, H332
	STOT SE 3, H335
	STOT RE 2, H373 (organs of hearing)
	Aquatic Chronic 3, H412

Titanium dioxide (in powder form containing 1 % or more of particles with aerodynamic diameter <= 10 μm)	
Registration number (REACH)	
Index	022-006-002
EINECS, ELINCS, NLP	236-675-5
CAS	13463-67-7
content %	1-10
Classification according to Regulation (EC) 1272/2008	Carc. 2, H351 (as inhalation)
(CLP)	

m-tolylidene diisocyanate	
Registration number (REACH)	01-2119454791-34-XXXX
Index	615-006-00-4
EINECS, ELINCS, NLP	247-722-4
CAS	26471-62-5
content %	0,1-<1
Classification according to Regulation (EC) 1272/2008	Carc. 2, H351
(CLP)	Acute Tox. 1, H330
	Eye Irrit. 2, H319
	STOT SE 3, H335
	Skin Irrit. 2, H315
	Resp. Sens. 1, H334
	Skin Sens. 1, H317
	Aquatic Chronic 3, H412

4,5-Dichloro-2-octyl-2H-isothiazol-3-one	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	264-843-8
CAS	64359-81-5
content %	0,0025-<0,025



Page 4 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

Classification according to Regulation (EC) 1272/2008	Acute Tox. 4, H302
(CLP)	Skin Corr. 1B, H314
	Skin Sens. 1, H317
	Eye Dam. 1, H318
	Acute Tox. 2, H330
	STOT SE 3, H335
	Aquatic Acute 1, H400 (M=100)
	Aquatic Chronic 1, H410 (M=10)

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. 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. Eve 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. 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. In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours. Watering eyes Drying of the skin. Dermatitis (skin inflammation) Allergic reaction possible. In case of sensitivity, concentrations below the limit value may already result in asthmatic symptoms. Ingestion: Nausea Vomiting Danger of aspiration. Oedema of the lungs Chemical pneumonitis (condition similar to pneumonia) 4.3 Indication of any immediate medical attention and special treatment needed Gastric lavage (stomach washing) only under endotracheal intubation.



Page 5 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

Subsequent observation for pneumonia and pulmonary oedema.

## **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 Oxides of nitrogen Hydrogen cyanide Toxic gases Explosive vapour/air or gas/air mixtures. 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 Keep unprotected persons away. Ensure sufficient supply of air. Remove possible causes of ignition - do not smoke. Avoid 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 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, sawdust) and dispose of according to Section 13. Fill the absorbed material into lockable containers. 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.



œ

Page 6 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

# 7.1 Precautions for safe handling

7.1.1 General recommendations Ensure good ventilation. Avoid inhalation of the vapours. Keep away from sources of ignition - Do not smoke. Take precautions against electrostatic charges. Avoid contact with eyes or skin. No contact with products of this type in case of allergies, asthma und chronic respiratory tract disorders. 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. Observe special storage conditions. Under all circumstances prevent penetration into the soil. Do not store with flammable or self-igniting materials. Protect from direct sunlight and warming. Store in a well ventilated place. Store cool. 7.3 Specific end use(s) No information available at present.

# **SECTION 8: Exposure controls/personal protection**

# 8.1 Control parameters

<sup>(68)</sup> Chemical Name	Reaction mas	s of ethylbenzene and m-xy	lene and p-xylene		Content %:10-<25	
WEL-TWA: 220 mg/m3 (5	50 ppm)	WEL-STEL: 100 ppm				
(WEL), 50 ppm (221 mg/m3	) (EU)	(WEL), 100 ppm (442 m	g/m3) (EU)			
(Xylene), 100 ppm (441mg	/m3) (WEL),	(Xylene), 125 ppm (552	mg/m3) (WEL),			
100 ppm (442 mg/m3) (EU)		200 ppm (884 mg/m3) (E	EU)			
(Ethylbenzene)		(Ethylbenzene)				
Monitoring procedures:	Monitoring procedures: INSHT MTA/MA-030/A92 (Determination of aromatic					
		hydrocarbons (benzene, tol	uene, ethylbenzene, p	o-xylen	e, 1,2,4-	
		trimethylbenzene) in air - C	harcoal tube method	/ Gas		
		chromatography) - 1992 - E	EU project BC/CEN/E	ENTR/	000/2002-16	
	-	card 47-1 (2004)				
	-	OSHA 1002 (Xylenes (o-, 1	n-, p-isomers) Ethylb	enzene	e) - 1999	
	-	Draeger - Hydrocarbons 0,1	1%/c (81 03 571)			
- Draeger - Hydrocarbons 2/a (81 03 581)						
BMGV: 650 mmol methyl	hippuric acid/n	nol creatinine in urine,	Other information:	Sk (V	WEL)	
post shift (Xylene, o-, m-, p-	or mixed isome	ers) (BMGV) (Xylene)	(Xylene), Sk (WEI	L) (Eth	ylbenzene)	



Page 7 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

Chemical Name	Titanium dioxide (in powder form containing 1 % or more or particles with aerodynamic diameter $\leq 10 \mu$ m)					Content %:1- 10
WEL-TWA: 10 mg/m3 (to		WEL-STEL:				
dust), 4 mg/m3 (respirable du	ust)					
Monitoring procedures:	-					
BMGV:				Other information	:	
Chemical Name	m-tolylidene d	liisocyanate				Content %:0,1-<1
WEL-TWA: 0,02 mg/m3 ( all (as -NCO))	Isocyanates,	WEL-STEL: all (as -NCO))	-	n3 (Isocyanates,		/0.0,1 <1
Monitoring procedures:	-					
BMGV: 1 µmol isocyanate (At the end of the period of e		e/mol creatinine	e in urine	Other information all (as -NCO))	: Sen	(Isocyanates,
<sup>(GB)</sup> Chemical Name	Silica, amorph	nous				Content %:
WEL-TWA: 6 mg/m3 (tota	al inh. dust),	WEL-STEL:				
2,4 mg/m3 (resp. dust)						
Monitoring procedures:	-					
BMGV:				Other information	:	
Chemical Name	Diisononyl ph	thalate				Content %:
WEL-TWA: 5 mg/m3		WEL-STEL:				
Monitoring procedures:	-					
BMGV:				Other information	:	

Reaction mass of ethylbenzene and m-xylene and p-xylene						
Area of application	Exposure route /	Effect on health	Descript	Value	Unit	Note
	Environmental		or			
	compartment					
	Environment -		PNEC	0,327	mg/l	
	freshwater					
	Environment - marine		PNEC	0,327	mg/l	
	Environment -		PNEC	12,46	mg/kg	
	sediment, freshwater					
	Environment -		PNEC	12,46	mg/kg	
	sediment, marine					
	Environment - soil		PNEC	2,31	mg/kg	
	Environment -		PNEC	6,58	mg/l	
	sewage treatment					
	plant					
Workers / employees	Human - inhalation	Long term,	DNEL	221	mg/m3	
		systemic effects				
Workers / employees	Human - inhalation	Short term,	DNEL	442	mg/m3	
		systemic effects				

Titanium dioxide (in powder form containing 1 % or more of particles with aerodynamic diameter <= 10 µm)						
Area of application	Exposure route /	Effect on health	Descript	Value	Unit	Note
	Environmental		or			
	compartment					



Page 8 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

	1	1	1		, , , , , , , , , , , , , , , , , , ,	
	Environment -		PNEC	0,184	mg/l	
	freshwater					
	Environment - marine		PNEC	0,018	mg/l	
				4		
	Environment - water,		PNEC	0,193	mg/l	
	sporadic					
	(intermittent) release					
	Environment -		PNEC	100	mg/l	
	sewage treatment					
	plant					
	Environment -		PNEC	1000	mg/kg	
	sediment, freshwater				dw	
	Environment -		PNEC	100	mg/kg	
	sediment, marine				dw	
	Environment - soil		PNEC	100	mg/kg	
					dw	
	Environment - oral		PNEC	1667	mg/kg	
	(animal feed)				feed	
Consumer	Human - oral	Long term,	DNEL	700	mg/kg	
		systemic effects			bw/d	
Workers / employees	Human - inhalation	Long term, local	DNEL	10	mg/m3	
		effects				

Silica, amorphous											
Area of application	Exposure route /	Effect on health	Descript	Value	Unit	Note					
	Environmental		or								
	compartment										
	Environment - oral		PNEC	60000	mg/kg						
	(animal feed)				feed						
Workers / employees	Human - inhalation	Long term, local	DNEL	4	mg/m3						
		effects									

Diisononyl phthalate						
Area of application	Exposure route / Environmental	Descript or	Value	Unit	Note	
	compartment					
	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	
Consumer	Human - dermal	Long term, systemic effects	DNEL	220	mg/kg	
Consumer	Human - oral	Long term, systemic effects	DNEL	4,4	mg/kg	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	366	mg/kg	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	51,72	mg/m3	



Page 9 of 24
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002
Replacing version dated / version: 17.12.2019 / 0001
Valid from: 13.11.2020
PDF print date: 13.11.2020
4F-Sealing 1K-PUR Faser 6 kg
Art.: 9095830

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). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).

(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU).
(10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

\*\* = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

(13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).

# 8.2 Exposure controls8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

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 gloves in butyl rubber (EN 374). Minimum layer thickness in mm: >= 0,5 Protective gloves made of fluorocarbon rubber (EN 374). Minimum layer thickness in mm: >= 0,4 Permeation time (penetration time) in minutes:

>= 480



Page 10 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

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

The recommended maximum wearing time is 50% of breakthrough time. Protective hand cream recommended.

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

Respiratory protection: If OES or MEL is exceeded. 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 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:	According to specification
Odour:	Characteristic
Odour threshold:	Not determined
pH-value:	Not determined
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined
Flash point:	27 °C (Xylene)
Evaporation rate:	Not determined
Flammability (solid, gas):	n.a.
Lower explosive limit:	Not determined
Upper explosive limit:	Not determined
Vapour pressure:	Not determined
Vapour density (air $=$ 1):	Not determined
Density:	1,35 g/cm3 (20°C)



Page 11 of 24
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002
Replacing version dated / version: 17.12.2019 / 0001
Valid from: 13.11.2020
PDF print date: 13.11.2020
4F-Sealing 1K-PUR Faser 6 kg
Art.: 9095830

Bulk density: Solubility(ies): Water solubility: Partition coefficient (n-octanol/water): Auto-ignition temperature: Decomposition temperature: Viscosity: Explosive properties:

Oxidising properties: 9.2 Other information Miscibility: Fat solubility / solvent: Conductivity: Surface tension: Solvents content: n.a. Not determined Not miscible Not determined 488 °C (Ignition temperature Xylene) Not determined >90 mPas (20°C) Product is not explosive. When using: development of explosive vapour/air mixture possible. No Not determined Not determined Not determined Not determined Not determined

Not determined

## **SECTION 10: Stability and reactivity**

#### **10.1 Reactivity**

The product has not been tested. **10.2 Chemical stability** Stable with proper storage and handling. **10.3 Possibility of hazardous reactions** No dangerous reactions are known. **10.4 Conditions to avoid** Heating, open flame, ignition sources Electrostatic charge **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). **4F-Sealing 1K-PUR Faser 6 kg** 

41-Seaming IK-I UK Fas	er u kg					
Art.: 9095830						
Toxicity / effect	Endpoi	Value	Unit	Organism	Test method	Notes
	nt			_		
Acute toxicity, by oral						n.d.a.
route:						
Acute toxicity, by	ATE	6575	mg/kg			calculated
dermal route:						value
Acute toxicity, by	ATE	28,4	mg/l/4h			calculated
inhalation:						value,
						Vapours
Skin corrosion/irritation:						n.d.a.



Page 12 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

[ ~ .			
Serious eye			n.d.a.
damage/irritation:			
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			n.d.a.
toxicity - single			
exposure (STOT-SE):			
Specific target organ			n.d.a.
toxicity - repeated			
exposure (STOT-RE):			
Aspiration hazard:			Asp. Tox. 1
Symptoms:			n.d.a.

Reaction mass of ethylbe Toxicity / effect	Endpoi	Value		Organism	Test method	Notes
Tomory / eneer	nt	, and		orgunishi	1 obt memora	110000
Acute toxicity, by oral route:	LD50	3523	mg/kg	Rat	Regulation (EC) 440/2008 B.1 (ACUTE ORAL TOXICITY)	
Acute toxicity, by inhalation:	LC50	6350	ppm	Rat	Regulation (EC) 440/2008 B.2 (ACUTE TOXICITY (INHALATION))	Vapours
Germ cell mutagenicity:					OECD 478 (Genetic Toxicology - Rodent dominant Lethal Test)	Negative, Analogous conclusion
Germ cell mutagenicity:				Salmonella typhimuri um	OECD 471 (Bacterial Reverse Mutation Test)	Negative, Analogous conclusion
Aspiration hazard:						Asp. Tox. 1

Titanium dioxide (in powder form containing 1 % or more of particles with aerodynamic diameter <= 10 μm)									
Toxicity / effect	Endpoi	Value	Unit	Organism	Test method	Notes			
	nt								
Acute toxicity, by oral	LD50	>5000	mg/kg	Rat	OECD 425 (Acute				
route:					Oral Toxicity -				
					Up-and-Down				
					Procedure)				
Acute toxicity, by	LD50	>5000	mg/kg	Rabbit					
dermal route:									
Acute toxicity, by	LD50	>6,8	mg/l/4h	Rat					
inhalation:									



Page 13 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

Skin corrosion/irritation:	Rabbit	OECD 404 (Acute Dermal Irritation/Corrosio n)	Not irritant
Serious eye damage/irritation:	Rabbit	OECD 405 (Acute Eye Irritation/Corrosio n)	Not irritant, Mechanical irritation possible.
Respiratory or skin sensitisation:	Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Not sensitizising
Respiratory or skin sensitisation:	Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:	Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Germ cell mutagenicity:	Salmonella typhimuri um	(Ames-Test)	Negative
Germ cell mutagenicity:		OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity:		OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Germ cell mutagenicity:		OECD 471 (Bacterial Reverse Mutation Test)	Negative
Reproductive toxicity (Developmental toxicity):	Rat	OECD 414 (Prenatal Developmental Toxicity Study)	No indications of such an effect.
Specific target organ toxicity - single exposure (STOT-SE):			Not irritant (respiratory tract).
Symptoms:			mucous membrane irritation, coughing, respiratory distress, drying of the skin.



Page 14 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

Specific target organ toxicity - repeated	NOAEL	3500	mg/kg/ d	Rat	90d
exposure (STOT-RE),					
oral: Specific target organ	NOAEC	10	mg/m3	Rat	90d
toxicity - repeated			8,		
exposure (STOT-RE),					
inhalat.:					

m-tolylidene diisocyana	m-tolylidene diisocyanate							
Toxicity / effect	Endpoi	Value	Unit	Organism	Test method	Notes		
	nt							
Acute toxicity, by oral	LD50	5800	mg/kg	Rat				
route:								
Symptoms:						asthmatic		
						symptoms,		
						breathing		
						difficulties,		
						eyes,		
						reddened,		
						coughing,		
						mucous		
						membrane		
						irritation		

4,5-Dichloro-2-octyl-2H-isothiazol-3-one							
Toxicity / effect	Endpoi	Value	Unit	Organism	Test method	Notes	
	nt						
Acute toxicity, by oral	LD50	1636	mg/kg	Rat			
route:							
Acute toxicity, by	LC50	0,26	mg/l/4h	Rat		Mist	
inhalation:							
Respiratory or skin				Guinea pig		Sensitising	
sensitisation:						(skin	
						contact)	
Aspiration hazard:						No	
Specific target organ	NOAEL	20	mg/kg	Rat		28d	
toxicity - repeated							
exposure (STOT-RE),							
oral:							
Specific target organ	LOAEL	100	mg/kg	Rat		28d	
toxicity - repeated							
exposure (STOT-RE),							
oral:							

Silica, amorphous						
Toxicity / effect	Endpoi	Value	Unit	Organism	Test method	Notes
	nt			_		
Acute toxicity, by oral	LD50	>5000	mg/kg	Rat	OECD 401 (Acute	Analogous
route:					Oral Toxicity)	conclusion



Page 15 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit	
Acute toxicity, by inhalation:	LC50	>0,139	mg/l/4h	Rat	References, Maximum achievable concentration
Skin corrosion/irritation:				Rabbit	Not irritant, References
Serious eye damage/irritation:				Rabbit	Not irritant, Mechanical irritation possible., References
Respiratory or skin sensitisation:				Guinea pig	Not sensitizising
Germ cell mutagenicity:					Negative
Carcinogenicity:					No indications of such an effect.
Reproductive toxicity (Developmental toxicity):					No indications of such an effect.
Symptoms:					eyes, reddened

Diisononyl phthalate						
Toxicity / effect	Endpoi	Value	Unit	Organism	Test method	Notes
	nt					
Acute toxicity, by oral	LD50	>10000	mg/kg	Rat	OECD 401 (Acute	
route:					Oral Toxicity)	
Acute toxicity, by	LD50	>3160	mg/kg	Rabbit		
dermal route:						
Acute toxicity, by	LC50	>4,4	mg/l/4h	Rat	Limit-Test	Aerosol
inhalation:						
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Not irritant
					Dermal	
					Irritation/Corrosio	
					n)	
Serious eye				Rabbit	OECD 405 (Acute	Not irritant
damage/irritation:					Eye	
					Irritation/Corrosio	
					n)	
Respiratory or skin				Guinea pig	Regulation (EC)	No (skin
sensitisation:					440/2008 B.6	contact)
					(SKIN	
					SENSITISATION)	
Germ cell mutagenicity:					(Ames-Test)	Negative



Page 16 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

Symptoms:			diarrhoea,
			nausea and
			vomiting.

## **SECTION 12: Ecological information**

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

4F-Sealing 1K-PU	R Faser 6 kg						
Art.: 9095830							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to							n.d.a.
fish:							
12.1. Toxicity to							n.d.a.
daphnia:							
12.1. Toxicity to							n.d.a.
algae:							
12.2. Persistence							n.d.a.
and degradability:							
12.3.							n.d.a.
Bioaccumulative							
potential:							
12.4. Mobility in							n.d.a.
soil:							
12.5. Results of							n.d.a.
PBT and vPvB							
assessment							
12.6. Other							n.d.a.
adverse effects:							

Reaction mass of ethylbenzene and m-xylene and p-xylene											
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes				
12.5. Results of							No PBT				
PBT and vPvB							substance,				
assessment							No vPvB				
							substance				
Toxicity to	NOEC/NO	14d	16	mg/kg							
annelids:	EL			dw							

Titanium dioxide (	Titanium dioxide (in powder form containing 1 % or more of particles with aerodynamic diameter <= 10										
μm)											
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes				
12.1. Toxicity to	LC50	96h	>100	mg/l	Oncorhynchus	OECD 203					
fish:					mykiss	(Fish, Acute					
						Toxicity Test)					
12.1. Toxicity to	LC50	48h	>100	mg/l	Daphnia	OECD 202					
daphnia:					magna	(Daphnia sp.					
						Acute					
						Immobilisatio					
						n Test)					



Page 17 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

12.1. Toxicity to algae:	EC50	72h	16	mg/l	Pseudokirchne riella subcapitata	U.S. EPA- 600/9-78-018	
12.2. Persistence and degradability:					Subtuprium		Not relevant for inorganic substances.
12.3. Bioaccumulative potential:	BCF	42d	9,6				Not to be expected
12.3. Bioaccumulative potential:	BCF	14d	19- 352				Oncorhynchu s mykiss
12.4. Mobility in soil:							Negative
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:			>5000	mg/l	Escherichia coli		
Toxicity to bacteria:	LC0	24h	>1000 0	mg/l	Pseudomonas fluorescens		
Toxicity to annelids:	NOEC/NO EL		>1000	mg/kg	Eisenia foetida		
Water solubility:							Insoluble20° C

4,5-Dichloro-2-oct	4,5-Dichloro-2-octyl-2H-isothiazol-3-one										
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes				
12.2. Persistence							Readily				
and degradability:							biodegradabl				
							e				
12.3.	BCF		750		Lepomis						
Bioaccumulative					macrochirus						
potential:											
12.3.	Log Pow		2,8								
Bioaccumulative											
potential:											
12.1. Toxicity to	LC50	96h	0,007	mg/l	Oncorhynchus						
fish:			8		mykiss						
12.1. Toxicity to	EC50	48h	0,009	mg/l	Daphnia						
daphnia:			7		magna						
12.1. Toxicity to	NOEC/NO	21d	0,000	mg/l	Daphnia						
daphnia:	EL		4		magna						
12.1. Toxicity to	NOEC/NO	72h	0,015	mg/l							
algae:	EL										
12.1. Toxicity to	EC50	72h	0,025	mg/l							
algae:											



Page 18 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

12.5. Results of				No PBT
PBT and vPvB				substance,
assessment				No vPvB
				substance

Silica, amorphous							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to	LC50	96h	>1000	mg/l	Brachydanio	OECD 203	
fish:			0		rerio	(Fish, Acute	
						Toxicity Test)	
12.1. Toxicity to	EC50	24h	>1000	mg/l	Daphnia	OECD 202	
daphnia:			0		magna	(Daphnia sp.	
						Acute	
						Immobilisatio	
						n Test)	
12.1. Toxicity to	EL50	72h	>1000	mg/l		OECD 201	
algae:			0			(Alga,	
						Growth	
						Inhibition	
						Test)	
12.2. Persistence							Abiotically
and degradability:							degradable.
12.3.							Not to be
Bioaccumulative							expected
potential:							
12.4. Mobility in							Not to be
soil:							expected
12.5. Results of							No PBT
PBT and vPvB							substance,
assessment							No vPvB
							substance

Diisononyl phthala	Diisononyl phthalate										
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes				
12.1. Toxicity to	LC50	96h	>102	mg/l	Brachydanio	92/69/EC					
fish:					rerio						
12.1. Toxicity to	EC50	48h	>=74	mg/l	Daphnia	84/449/EEC					
daphnia:				-	magna	C.2					
12.1. Toxicity to	NOEC/NO	21d	>=100	mg/l	Daphnia	OECD 202					
daphnia:	EL				magna	(Daphnia sp.					
						Acute					
						Immobilisatio					
						n Test)					
12.1. Toxicity to	NOEC/NO	72h	88	mg/l	Scenedesmus						
algae:	EL				subspicatus						
12.1. Toxicity to	EC50	72h	>88	mg/l	Scenedesmus	84/449/EEC					
algae:					subspicatus	C.3					



Page 19 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

12.2. Persistence and degradability:		28d	81	%	activated sludge	Regulation (EC) 440/2008 C.4- C (DETERMIN ATION OF 'READY' BIODEGRAD ABILITY - CO2 EVOLUTION TEST)	Readily biodegradabl e
12.3. Bioaccumulative potential:	Log Kow		8,8- 9,7			OECD 117 (Partition Coefficient (n- octanol/water) - HPLC method)	Analogous conclusion
12.3. Bioaccumulative potential:	BCF	14d	<3				Analogous conclusion
12.4. Mobility in soil:	Koc		>5000				
12.4. Mobility in soil:	H (Henry)		0,000 00149	atm*m 3/mol			
Toxicity to bacteria:	EC50	30min	>83,9	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Other organisms:	NOEC/NO EL	56d	>982, 4	mg/kg	Eisenia foetida		
Other organisms:	LC50	14d	>7372	mg/kg	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)



Page 20 of 24
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 13.11.2020 / 0002
Replacing version dated / version: 17.12.2019 / 0001
Valid from: 13.11.2020
PDF print date: 13.11.2020
4F-Sealing 1K-PUR Faser 6 kg
Art.: 9095830

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. Do not perforate, cut up or weld uncleaned container. Residues may present a risk of explosion.

# **SECTION 14: Transport information**

General statements		
14.1. UN number:	1866	
Transport by road/by rail (ADR/RID)		
14.2. UN proper shipping name:		
UN 1866 RESIN SOLUTION		
14.3. Transport hazard class(es):	3	
14.4. Packing group:	III	
Classification code:	F1	
LQ:	5 L	
14.5. Environmental hazards:	Not applicable	
Tunnel restriction code:	E	
Transport by sea (IMDG-code)		
14.2. UN proper shipping name:		
RESIN SOLUTION		
14.3. Transport hazard class(es):	3	
14.4. Packing group:	III	
EmS:	F-E, S-E	
Marine Pollutant:	n.a	
14.5. Environmental hazards:	Not applicable	
Transport by air (IATA)		
14.2. UN proper shipping name:		
Resin solution	<u></u>	
14.3. Transport hazard class(es):	3	
14.4. Packing group:	III	
14.5. Environmental hazards:	Not applicable	
14.6. Special precautions for user		
Persons employed in transporting dangerous goods mus		
All persons involved in transporting must observe safety regulations.		
Precautions must be taken to prevent damage.		
14.7. Transport in bulk according to Annex II of MA		
Freighted as packaged goods rather than in bulk, therefore not applicable.		
Minimum amount regulations have not been taken into account.		
Danger code and packing code on request.		
Comply with special provisions.		



Page 21 of 24
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002
Replacing version dated / version: 17.12.2019 / 0001
Valid from: 13.11.2020
PDF print date: 13.11.2020
4F-Sealing 1K-PUR Faser 6 kg
Art.: 9095830

# **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 maternity protection (national implementation of the Directive 92/85/EEC)! Regulation (EC) No 1907/2006, Annex XVII m-tolylidene diisocyanate 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.):

Hazard categories	Notes to Annex I	Qualifying quantity	Qualifying quantity
		(tonnes) of dangerous	(tonnes) of dangerous
		substances as referred to	substances as referred to
		in Article 3(10) for the	in Article 3(10) for the
		application of - Lower-	application of - Upper-
		tier requirements	tier requirements
P5c		5000	50000

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):

249 g/l

Treated goods as per Regulation (EU) No. 528/2012 must display specific information on the label. Please note Article 58 paragraph (3) subparagraph 2 of Regulation (EU) No. 528/2012. Approval of the biocidal active substance may mean that special conditions are required for marketing the treated goods.

These are indicated in the approval of the active substance.

Observe incident regulations.

# 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

#### **SECTION 16: Other information**

Revised sections:

2, 3, 11, 12, 15

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):



Page 22 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Flam. Liq. 3, H226	Classification based on test data.
STOT RE 2, H373	Classification according to calculation procedure.
Eye Irrit. 2, H319	Classification according to calculation procedure.
Skin Irrit. 2, H315	Classification according to calculation procedure.
Resp. Sens. 1, H334	Classification according to calculation procedure.
Asp. Tox. 1, H304	Classification according to calculation procedure.
Aquatic Chronic 3, H412	Classification according to calculation procedure.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H330 Fatal if inhaled.

H226 Flammable liquid and vapour.

H351 Suspected of causing cancer by inhalation.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

Flam. Liq. — Flammable liquid

STOT  $\hat{RE}$  — Specific target organ toxicity - repeated exposure

Eye Irrit. — Eye irritation

Skin Irrit. — Skin irritation

Resp. Sens. — Respiratory sensitization

Asp. Tox. — Aspiration hazard

Aquatic Chronic - Hazardous to the aquatic environment - chronic

Acute Tox. — Acute toxicity - dermal

Acute Tox. - Acute toxicity - inhalation

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

Carc. — Carcinogenicity

Skin Sens. — Skin sensitization

Acute Tox. — Acute toxicity - oral

Skin Corr. — Skin corrosion

Eye Dam. — Serious eye damage

Aquatic Acute - Hazardous to the aquatic environment - acute

Any abbreviations and acronyms used in this document:



GB Page 23 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830 according, according to acc., acc. to ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road) AOX Adsorbable organic halogen compounds approx. approximately Art., Art. no. Article number ASTM ASTM International (American Society for Testing and Materials) ATE Acute Toxicity Estimate BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany) BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany) BSEF The International Bromine Council body weight hw 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** ECHA European Chemicals Agency EEC European Economic Community **EINECS** European Inventory of Existing Commercial Chemical Substances **ELINCS** European List of Notified Chemical Substances EN European Norms EPA United States Environmental Protection Agency (United States of America) etc. et cetera EU European Union EVAL Ethylene-vinyl alcohol copolymer Fax. Fax number general gen. GHS Globally Harmonized System of Classification and Labelling of Chemicals GWP Global warming potential 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 incl. including, inclusive International Uniform Chemical Information Database IUCLID **IUPACInternational 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) LO Limited Ouantities 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



Page 24 of 24 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.11.2020 / 0002 Replacing version dated / version: 17.12.2019 / 0001 Valid from: 13.11.2020 PDF print date: 13.11.2020 4F-Sealing 1K-PUR Faser 6 kg Art.: 9095830

OECD Organisation for Economic Co-operation and Development

org. organic

PBT persistent, bioaccumulative and toxic

PE Polyethylene

PNEC Predicted No Effect Concentration

ppm parts per million

PVC Polyvinylchloride

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

SVHC Substances of Very High Concern

Tel. Telephone

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.