

Page 1 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

> 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 V 6 kg Art.: 9095829

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:

----TELL

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 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

Resp. Sens.	1	H334-May cause allergy or asthma symptoms or breathing difficulties if inhaled.
		uniteduces in initiated.
Skin Sens.	1	H317-May cause an allergic skin reaction.
Asp. Tox.	1	H304-May be fatal if swallowed and enters airways.
Aquatic Chronic	3	H412-Harmful to aquatic life with long lasting effects.

2.2 Label elements

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



Danger

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. H317-May cause an allergic skin reaction. 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.

As from 24 August 2023 adequate training is required before industrial or professional use. m-tolylidene diisocyanate

4,5-Dichloro-2-octyl-2H-isothiazol-3-one

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

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 %).

Dangerous vapours heavier than air.

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



Page 3 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

SECTION 3: Composition/information on ingredients

n.a. 3 2 Mixtures

3.2 Mixtures	
Reaction mass of ethylbenzene and m-xylene and p-	Substance for which an EU exposure limit
xylene	value applies.
Registration number (REACH)	01-2119488216-32-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	905-562-9
CAS	
content %	10-<25
Classification according to Regulation (EC) 1272/2008	Flam. Liq. 3, H226
(CLP), M-factors	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, REACH-IT List-No.	236-675-5
CAS	13463-67-7
content %	1-10
Classification according to Regulation (EC) 1272/2008	Carc. 2, H351 (as inhalation)
(CLP), M-factors	

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics,	
<2% aromatics	
Registration number (REACH)	01-2119463258-33-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	919-857-5
CAS	
content %	0-2,5
Classification according to Regulation (EC) 1272/2008	Flam. Liq. 3, H226
(CLP), M-factors	Asp. Tox. 1, H304
	STOT SE 3, H336

m-tolylidene diisocyanate	
Registration number (REACH)	01-2119454791-34-XXXX
Index	615-006-00-4
EINECS, ELINCS, NLP, REACH-IT List-No.	247-722-4
CAS	26471-62-5
content %	0,1-<1



Page 4 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

Classification according to Regulation (EC) 1272/2008	Carc. 2, H351
(CLP), M-factors	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	613-335-00-8
EINECS, ELINCS, NLP, REACH-IT List-No.	264-843-8
CAS	64359-81-5
content %	0,0025-<0,025
Classification according to Regulation (EC) 1272/2008	Acute Tox. 2, H330
(CLP), M-factors	Acute Tox. 4, H302
	Skin Corr. 1, H314
	Eye Dam. 1, H318
	Skin Sens. 1A, H317
	Aquatic Acute 1, H400 (M=100)
	Aquatic Chronic 1, H410 (M=100)

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

The substances named in this section are given with their actual, appropriate classification! For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account. If, for example, the note P is applied for a hydrocarbon then this has already been taken into account for the classification named here.

Quote: "Note P - The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7)."

Article 4 of the regulation (EC) no. 1272/2008 (CLP regulation) was also observed and taken into account for the classification named here.

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

Inhalation

Remove person from danger area.

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

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

Skin contact

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

Eye contact

Remove contact lenses. Wash thoroughly for several minutes using copious water. Seek medical help if necessary. Ingestion



Page 5 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

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. 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 Toxic gases Formation of highly flammable vapour/air mixtures possible. Explosive vapour/air or gas/air mixtures. Danger of bursting (explosion) when heated Hydrocyanic acid (hydrogen cyanide) 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. 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



Page 6 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

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.

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.



Page 7 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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

Chemical Name	Reaction mass	of ethylbenzene and m-xy	lene and p-xylene		Content %:10-<25
WEL-TWA: 220 mg/m3 (5	50 ppm)	WEL-STEL: 100 ppm	(441 mg/m3		,0110 (20
(WEL), 50 ppm (221 mg/m3		(WEL), 100 ppm (442 m			
(Xylene), 100 ppm (441mg/		(Xylene), 125 ppm (552			
100 ppm (442 mg/m3) (EU)	- / (/ / / / / / / / / / / / / / /	200 ppm (884 mg/m3) (E			
(Ethylbenzene)		(Ethylbenzene)	- /		
Monitoring procedures:	Ι	NSHT MTA/MA-030/A92	2 (Determination of	aromati	ic
	ł	ydrocarbons (benzene, tol	uene, ethylbenzene,	p-xyler	ne, 1,2,4-
	t	rimethylbenzene) in air - C	Charcoal tube metho	d / Gas	
	C	chromatography) - 1992 - H	EU project BC/CEN	/ENTR	/000/2002-16
	- 0	card 47-1 (2004)			
		OSHA 1002 (Xylenes (o-, 1		lbenzen	ie) - 1999
		Draeger - Hydrocarbons 0,			
		Draeger - Hydrocarbons 2/a			
		ol creatinine in urine,	Other information		WEL)
post shift (Xylene, o-, m-, p-	or mixed isome	rs) (BMGV) (Xylene)	(Xylene), Sk (WI	EL) (Etł	nylbenzene)
^(B)	Titanium diox	ide (in powder form contai	ning 1 % or more of	f	Content %:1-
Chemical Name		es with aerodynamic diameter $\leq 10 \mu\text{m}$)			10
WEL-TWA: 10 mg/m3 (to	tal inhalable	WEL-STEL:			
dust), 4 mg/m3 (respirable du	ust)				
Monitoring procedures:	-		-		
BMGV:				·	
			Other information	:	
Chemical Name	· ·	, C9-C11, n-alkanes, isoalk		:	Content %:0-
⁽⁶⁸⁾ Chemical Name	Hydrocarbons aromatics				Content %:0- 2,5
Chemical Name WEL-TWA: 800 mg/m3	aromatics	WEL-STEL:	canes, cyclics, <2%		
⁽⁶⁸⁾ Chemical Name	aromatics - I	WEL-STEL: Draeger - Hydrocarbons 0,	xanes, cyclics, <2%		
Chemical Name WEL-TWA: 800 mg/m3	aromatics - I - I	WEL-STEL: Draeger - Hydrocarbons 0, Draeger - Hydrocarbons 2/a	canes, cyclics, <2%		
Chemical Name WEL-TWA: 800 mg/m3 Monitoring procedures:	aromatics - I - I	WEL-STEL: Draeger - Hydrocarbons 0,	kanes, cyclics, <2% 1%/c (81 03 571) a (81 03 581) 1 174)		2,5
Chemical Name WEL-TWA: 800 mg/m3	aromatics - I - I	WEL-STEL: Draeger - Hydrocarbons 0, Draeger - Hydrocarbons 2/a	canes, cyclics, <2%	 : (OE	2,5 L acc. to
Chemical Name WEL-TWA: 800 mg/m3 Monitoring procedures: BMGV:	aromatics - I - I - (WEL-STEL: Draeger - Hydrocarbons 0, Draeger - Hydrocarbons 2/a Compur - KITA-187 S (55	kanes, cyclics, <2% 1%/c (81 03 571) a (81 03 581) 1 174) Other information	 : (OE	2,5 L acc. to
 Chemical Name WEL-TWA: 800 mg/m3 Monitoring procedures: BMGV: Chemical Name 	aromatics - I - I - C m-tolylidene d	WEL-STEL: Draeger - Hydrocarbons 0, Draeger - Hydrocarbons 2/a Compur - KITA-187 S (55 liisocyanate	xanes, cyclics, <2% 1%/c (81 03 571) a (81 03 581) 1 174) Other information RCP-method, para	 : (OE	2,5 L acc. to 84-87, EH40)
Chemical Name WEL-TWA: 800 mg/m3 Monitoring procedures: BMGV:	aromatics - I - I - C m-tolylidene d	WEL-STEL: Draeger - Hydrocarbons 0, Draeger - Hydrocarbons 2/a Compur - KITA-187 S (55 liisocyanate	kanes, cyclics, <2% 1%/c (81 03 571) a (81 03 581) 1 174) Other information	 : (OE	2,5 L acc. to 84-87, EH40) Content
 Chemical Name WEL-TWA: 800 mg/m3 Monitoring procedures: BMGV: Chemical Name WEL-TWA: 0,02 mg/m3 (all (as -NCO)) 	aromatics - I - I - C m-tolylidene d	WEL-STEL: Draeger - Hydrocarbons 0, Draeger - Hydrocarbons 2/a Compur - KITA-187 S (55 liisocyanate	xanes, cyclics, <2% 1%/c (81 03 571) a (81 03 581) 1 174) Other information RCP-method, para	 : (OE	2,5 L acc. to 84-87, EH40) Content
 Chemical Name WEL-TWA: 800 mg/m3 Monitoring procedures: BMGV: Chemical Name WEL-TWA: 0,02 mg/m3 (all (as -NCO)) Monitoring procedures: 	aromatics - I - I - C m-tolylidene d Isocyanates,	WEL-STEL: Draeger - Hydrocarbons 0, Draeger - Hydrocarbons 2/a Compur - KITA-187 S (55 iiisocyanate WEL-STEL: 0,07 mg/r all (as -NCO))	xanes, cyclics, <2% 1%/c (81 03 571) a (81 03 581) 1 174) Other information RCP-method, para	 : (OE agraphs	2,5 L acc. to 84-87, EH40) Content %:0,1-<1
 Chemical Name WEL-TWA: 800 mg/m3 Monitoring procedures: BMGV: Chemical Name WEL-TWA: 0,02 mg/m3 (all (as -NCO)) Monitoring procedures: BMGV: 1 µmol isocyanate 	aromatics - I - I - C m-tolylidene d Isocyanates, -derived diamin	WEL-STEL: Draeger - Hydrocarbons 0, Draeger - Hydrocarbons 2/a Compur - KITA-187 S (55 iiisocyanate WEL-STEL: 0,07 mg/r all (as -NCO))	xanes, cyclics, <2% 1%/c (81 03 571) a (81 03 581) 1 174) Other information RCP-method, para m3 (Isocyanates, Other information	 : (OE agraphs	2,5 L acc. to 84-87, EH40) Content
 Chemical Name WEL-TWA: 800 mg/m3 Monitoring procedures: BMGV: Chemical Name WEL-TWA: 0,02 mg/m3 (all (as -NCO)) Monitoring procedures: 	aromatics - I - I - C m-tolylidene d Isocyanates, -derived diamin	WEL-STEL: Draeger - Hydrocarbons 0, Draeger - Hydrocarbons 2/a Compur - KITA-187 S (55 iiisocyanate WEL-STEL: 0,07 mg/r all (as -NCO))	xanes, cyclics, <2% 1%/c (81 03 571) a (81 03 581) 1 174) Other information RCP-method, para m3 (Isocyanates,	 : (OE agraphs	2,5 L acc. to 84-87, EH40) Content %:0,1-<1
 Chemical Name WEL-TWA: 800 mg/m3 Monitoring procedures: BMGV: Chemical Name WEL-TWA: 0,02 mg/m3 (all (as -NCO)) Monitoring procedures: BMGV: 1 µmol isocyanate 	aromatics - I - I - C m-tolylidene d Isocyanates, derived diamin exposure)	WEL-STEL: Draeger - Hydrocarbons 0, Draeger - Hydrocarbons 2/a Compur - KITA-187 S (55 liisocyanate WEL-STEL: 0,07 mg/r all (as -NCO)) e/mol creatinine in urine	xanes, cyclics, <2% 1%/c (81 03 571) a (81 03 581) 1 174) Other information RCP-method, para m3 (Isocyanates, Other information	 i: (OE agraphs	2,5 L acc. to 84-87, EH40) Content %:0,1-<1
 Chemical Name WEL-TWA: 800 mg/m3 Monitoring procedures: BMGV: Chemical Name WEL-TWA: 0,02 mg/m3 (all (as -NCO)) Monitoring procedures: BMGV: 1 µmol isocyanate (At the end of the period of e 	aromatics - I - I - C m-tolylidene d Isocyanates, -derived diamin	WEL-STEL: Draeger - Hydrocarbons 0, Draeger - Hydrocarbons 2/a Compur - KITA-187 S (55 liisocyanate WEL-STEL: 0,07 mg/r all (as -NCO)) e/mol creatinine in urine	xanes, cyclics, <2% 1%/c (81 03 571) a (81 03 581) 1 174) Other information RCP-method, para m3 (Isocyanates, Other information	 i: (OE agraphs	2,5 L acc. to 84-87, EH40) Content %:0,1-<1 (Isocyanates,
 Chemical Name WEL-TWA: 800 mg/m3 Monitoring procedures: BMGV: Chemical Name WEL-TWA: 0,02 mg/m3 (all (as -NCO)) Monitoring procedures: BMGV: 1 µmol isocyanate (At the end of the period of et Chemical Name 	aromatics - I - I - C m-tolylidene d Isocyanates, derived diamin exposure) Diisononyl ph	WEL-STEL: Draeger - Hydrocarbons 0, Draeger - Hydrocarbons 2/a Compur - KITA-187 S (55 Hiisocyanate WEL-STEL: 0,07 mg/r all (as -NCO)) e/mol creatinine in urine Halate	xanes, cyclics, <2% 1%/c (81 03 571) a (81 03 581) 1 174) Other information RCP-method, para m3 (Isocyanates, Other information	 i: (OE agraphs : Sen	2,5 L acc. to 84-87, EH40) Content %:0,1-<1 (Isocyanates,
 Chemical Name WEL-TWA: 800 mg/m3 Monitoring procedures: BMGV: Chemical Name WEL-TWA: 0,02 mg/m3 (all (as -NCO)) Monitoring procedures: BMGV: 1 μmol isocyanate (At the end of the period of e Chemical Name WEL-TWA: 5 mg/m3 	aromatics - I - I - C m-tolylidene d Isocyanates, derived diamin exposure) Diisononyl ph	WEL-STEL: Draeger - Hydrocarbons 0, Draeger - Hydrocarbons 2/a Compur - KITA-187 S (55 liisocyanate WEL-STEL: 0,07 mg/r all (as -NCO)) e/mol creatinine in urine thalate WEL-STEL:	xanes, cyclics, <2% 1%/c (81 03 571) a (81 03 581) 1 174) Other information RCP-method, para m3 (Isocyanates, Other information	: (OE agraphs : Sen	2,5 L acc. to 84-87, EH40) Content %:0,1-<1 (Isocyanates,



Page 8 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

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 j μm)	powder form containing	1 % or more of par	ticles with a	aerodyna	mic diame	eter <= 10
Area of application	Exposure route / Environmental compartment	Effect on health	Descript or	Value	Unit	Note
	Environment - freshwater		PNEC	0,184	mg/l	
	Environment - marine		PNEC	0,018 4	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	0,193	mg/l	
	Environment - sewage treatment plant		PNEC	100	mg/l	
	Environment - sediment, freshwater		PNEC	1000	mg/kg dw	
	Environment - sediment, marine		PNEC	100	mg/kg dw	
	Environment - soil		PNEC	100	mg/kg dw	
	Environment - oral (animal feed)		PNEC	1667	mg/kg feed	
Consumer	Human - oral	Long term, systemic effects	DNEL	700	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	10	mg/m3	



Page 9 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics											
Area of application	Exposure route /	Effect on health	Descript	Value	Unit	Note					
	Environmental		or								
	compartment										
Consumer	Human - oral	Long term,	DNEL	300	mg/kg						
		systemic effects			bw/day						
Consumer	Human - dermal	Long term,	DNEL	300	mg/kg						
		systemic effects			bw/day						
Consumer	Human - inhalation	Long term,	DNEL	900	mg/m3						
		systemic effects			-						
Consumer	Human - dermal	Long term,	DNEL	125	mg/kg						
		systemic effects			bw/day						
Consumer	Human - inhalation	Long term,	DNEL	185	mg/m3						
		systemic effects			-						
Consumer	Human - oral	Long term,	DNEL	125	mg/kg						
		systemic effects			bw/day						
Workers / employees	Human - dermal	Long term,	DNEL	300	mg/kg						
		systemic effects			bw/day						
Workers / employees	Human - inhalation	Long term,	DNEL	1500	mg/m3						
		systemic effects			-						
Workers / employees	Human - dermal	Long term,	DNEL	208	mg/kg						
		systemic effects			bw/day						
Workers / employees	Human - inhalation	Long term,	DNEL	871	mg/m3						
		systemic effects									

Diisononyl phthalate						
Area of application	Exposure route /	Effect on health	Descript	Value	Unit	Note
	Environmental		or			
	compartment					
	Environment - soil		PNEC	30	mg/kg	
	Environment - oral		PNEC	150	mg/kg	
	(animal feed)					
Consumer	Human - inhalation	Long term,	DNEL	15,3	mg/m3	
		systemic effects				
Consumer	Human - dermal	Long term,	DNEL	220	mg/kg	
		systemic effects				
Consumer	Human - oral	Long term,	DNEL	4,4	mg/kg	
		systemic effects				
Workers / employees	Human - dermal	Long term,	DNEL	366	mg/kg	
		systemic effects				
Workers / employees	Human - inhalation	Long term, local	DNEL	51,72	mg/m3	
		effects				

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).



Page 10 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

(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 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).



Page 11 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

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:	27-32 °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:	1,34-1,35 g/cm3 (20°C)
Bulk density:	n.a.
Solubility(ies):	Not determined
Water solubility:	Not miscible
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	488 °C (Ignition temperature Xylene)
Decomposition temperature:	Not determined
Viscosity:	>90 mPas (20°C)



Page 12 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

Oxidising properties: 9.2 Other information Miscibility: Fat solubility / solvent: Conductivity: Surface tension: Solvents content: Product is not explosive. When using: development of explosive vapour/air mixture possible. No

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 V 6	kg					
Art.: 9095829						
Toxicity / effect	Endpoi	Value	Unit	Organism	Test method	Notes
	nt					
Acute toxicity, by oral						n.d.a.
route:						
Acute toxicity, by	ATE	6425	mg/kg			calculated
dermal route:						value
Acute toxicity, by	ATE	37,6	mg/l/4h			calculated
inhalation:			_			value,
						Vapours
Skin corrosion/irritation:						n.d.a.
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.



Page 13 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

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

Toxicity / effect	Endpoi nt	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 425 (Acute Oral Toxicity - Up-and-Down Procedure)	
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit	,, , ,, , ,, , ,, , ,, , , , , , , , , , , , , , , , , , , ,	
Acute toxicity, by inhalation:	LD50	>6,8	mg/l/4h	Rat		
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.



Page 14 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

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

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics



Page 15 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

Toxicity / effect	Endpoi nt	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by	LD50	>5000	mg/kg	Rabbit	OECD 402 (Acute	
dermal route:					Dermal Toxicity)	
Acute toxicity, by	LD50	>18,5	mg/l/4h	Rat	OECD 403 (Acute	
inhalation:					Inhalation	
					Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Not irritant,
					Dermal	Repeated
					Irritation/Corrosio	exposure
					n)	may cause
						skin dryness
						or cracking.
Serious eye				Rabbit	OECD 405 (Acute	Not irritant
damage/irritation:					Eye	
					Irritation/Corrosio	
					n)	
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin
sensitisation:					Sensitisation)	contact)
Germ cell mutagenicity:				Salmonella	OECD 471	Negative,
				typhimuri	(Bacterial Reverse	Analogous
				um	Mutation Test)	conclusion
Germ cell mutagenicity:				Human	OECD 473 (In	Negative,
				being	Vitro Mammalian	Analogous
					Chromosome	conclusion
~ ~					Aberration Test)	
Germ cell mutagenicity:				Rat	OECD 478	Negative,
					(Genetic	Analogous
					Toxicology -	conclusion
					Rodent dominant	
<u>a</u> :	NOADO	1100			Lethal Test)	T 1
Carcinogenicity:	NOAEC	1100	mg/m3	Mouse	OECD 453	Female
					(Combined	
					Chronic	
					Toxicity/Carcinoge	
<u>Canalization (1997)</u>	NOAEC	> 2200		Manaa	nicity Studies)	M-1-
Carcinogenicity:	NOAEC	>= 2200	mg/m3	Mouse	OECD 453 (Combined	Male
					Chronic	
					Toxicity/Carcinoge	
					nicity Studies)	
Reproductive toxicity:					OECD 414	Negative,
Reproductive toxicity.					(Prenatal	Analogous
					Developmental	conclusion
					Toxicity Study)	conclusion
Reproductive toxicity	NOAEL	>= 3000	mg/kg	Rat	OECD 415 (One-	Male
(Effects on fertility):	TOALL	/- 5000	bw/d	mai	Generation	wiate
(Literis on ferning).			Uw/u		Reproduction	
					-	
					Toxicity Study)	



Page 16 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

Reproductive toxicity (Effects on fertility):	NOAEL	>= 1500	mg/kg bw/d	Rat	OECD 415 (One- Generation	Female
					Reproduction Toxicity Study)	
Specific target organ toxicity - single						May cause drowsiness
exposure (STOT-SE):						or dizziness., STOT SE 3, H336
Aspiration hazard:						Yes
Symptoms: Specific target organ	NOAEL	3000	mg/kg/	Rat	OECD 408	unconsciousn ess, headaches, dizziness, discoloration of the skin, vomiting, diarrhoea Analogous
toxicity - repeated exposure (STOT-RE), oral:			d		(Repeated Dose 90-Day Oral Toxicity Study in Rodents)	conclusion
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEC	1444	ppm	Rat	OECD 413 (Subchronic Inhalation Toxicity - 90-Day Study)	Analogous conclusion

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	oxicity / effect Endpoi Value Unit Organism Test method Notes									
	nt									
Acute toxicity, by oral	ATE	567	mg/kg							
route:										



Page 17 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

Acute toxicity, by inhalation:	ATE	0,16	mg/l/4h			Dust, Mist
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosio n)	Corrosive
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Skin Sens. 1A
Aspiration hazard:						No
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	20	mg/kg	Rat		28d
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	LOAEL	100	mg/kg	Rat		28d

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
Symptoms:						diarrhoea,
						nausea and
						vomiting.

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification). 4F-Sealing 1K-PUR V 6 kg Art.: 9095829



Page 18 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

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 (in powder for	rm conta	ining 1 %	6 or more	of particles with	aerodynamic di	ameter <= 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)	
12.1. Toxicity to	EC50	72h	16	mg/l	Pseudokirchne	U.S. EPA-	
algae:					riella	600/9-78-018	
					subcapitata		
12.2. Persistence							Not relevant
and degradability:							for inorganic
							substances.
12.3.	BCF	42d	9,6				Not to be
Bioaccumulative							expected
potential:							



Page 19 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

12.3.	BCF	14d	19-			Oncorhynchu
Bioaccumulative			352			s mykiss
potential:						
12.4. Mobility in						Negative
soil:						
12.5. Results of						No PBT
PBT and vPvB						substance,
assessment						No vPvB
						substance
Toxicity to			>5000	mg/l	Escherichia	
bacteria:					coli	
Toxicity to	LC0	24h	>1000	mg/l	Pseudomonas	
bacteria:			0		fluorescens	
Toxicity to	NOEC/NO		>1000	mg/kg	Eisenia	
annelids:	EL				foetida	
Water solubility:						Insoluble20°
						С

Hydrocarbons, C9	-C11, n-alkar	nes, isoall	kanes, cy	clics, <2%	% aromatics		
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to	EL50	48h	0,95	mg/l			QSAR
bacteria:							
12.1. Toxicity to	LC50	96h	>1000	mg/l	Oncorhynchus	OECD 203	
fish:					mykiss	(Fish, Acute	
						Toxicity Test)	
12.1. Toxicity to fish:	NOELR	28d	0,13	mg/l	Oncorhynchus mykiss	QSAR	
12.1. Toxicity to	EC50	48h	>1000	mg/l	Daphnia	OECD 202	
daphnia:	2000		/ 1000		magna	(Daphnia sp.	
unpillin					magna	Acute	
						Immobilisatio	
						n Test)	
12.1. Toxicity to	ErC50	72h	>1000	mg/l	Pseudokirchne	OECD 201	
algae:					riella	(Alga,	
0					subcapitata	Growth	
						Inhibition	
						Test)	
12.1. Toxicity to	EbC50	72h	>1000	mg/l	Pseudokirchne	OECD 201	
algae:					riella	(Alga,	
					subcapitata	Growth	
						Inhibition	
						Test)	
12.1. Toxicity to	NOELR	72h	100	mg/l	Raphidocelis	OECD 201	
algae:					subcapitata	(Alga,	
						Growth	
						Inhibition	
						Test)	



Page 20 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

12.2 Demisteres		1.00	80	0/		OECD 201 E	D 111
12.2. Persistence		28d	80	%		OECD 301 F	Readily
and degradability:						(Ready	biodegradabl
						Biodegradabil	e
						ity -	
						Manometric	
						Respirometry	
						Test)	
12.1. Toxicity to	NOELR	72h	3	mg/l	Pseudokirchne	OECD 201	
algae:					riella	(Alga,	
					subcapitata	Growth	
					_	Inhibition	
						Test)	
12.3.			5-6,7				High
Bioaccumulative							
potential:							
12.5. Results of							No PBT
PBT and vPvB							substance,
assessment							No vPvB
							substance

4,5-Dichloro-2-octy	yl-2H-isothiaz	ol-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:							
12.5. Results of							No PBT
PBT and vPvB							substance,
assessment							No vPvB
							substance

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					



Page 21 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

12.1. Toxicity to	EC50	48h	>=74	mg/l	Daphnia	84/449/EEC	
daphnia:					magna	C.2	
12.1. Toxicity to daphnia:	NOEC/NO EL	21d	>=100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisatio n Test)	
12.1. Toxicity to algae:	NOEC/NO EL	72h	88	mg/l	Scenedesmus subspicatus		
12.1. Toxicity to algae:	EC50	72h	>88	mg/l	Scenedesmus subspicatus	84/449/EEC C.3	
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		



Page 22 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

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)

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



Page 23 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

Transport by air (IATA)

1 2 2 2			
14.2. UN proper shipping name:			
Resin solution			
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 must	t be trained.		
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	RPOL and the IBC Code		
Freighted as packaged goods rather than in bulk, therefo	re not applicable.		
Minimum amount regulations have not been taken into a	account.		
Danger code and packing code on request.			
Comply with special provisions.			

SECTION 15: Regulatory information

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

Observe restrictions: Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)! Regulation (EC) No 1907/2006, Annex XVII m-tolylidene diisocyanate Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)!

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):

262 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.



Page 24 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

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):

Classification in accordance with regulation (EC)	Evaluation method used
No. 1272/2008 (CLP)	
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.
Skin Sens. 1, H317	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.

H317 May cause an allergic skin reaction.

H314 Causes severe skin burns and eye damage.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

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.

H336 May cause drowsiness or dizziness.

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 RE - Specific target organ toxicity - repeated exposure



Page 25 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

Eye Irrit. — Eye irritation Skin Irrit. — Skin irritation Resp. Sens. — Respiratory sensitization Skin Sens. — Skin sensitization Asp. Tox. — Aspiration hazard Aquatic Chronic — Hazardous to the aquatic environment - chronic Acute Tox. — Acute toxicity - dermal Acute Tox. — Acute toxicity - dermal Acute Tox. — Acute toxicity - inhalation STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation Carc. — Carcinogenicity STOT SE — Specific target organ toxicity - single exposure - narcotic effects 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:

acc., acc. to according, according to

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road) AOX Adsorbable organic halogen compounds

approx. approximately

Art., Art. no. Article number

ASTM ASTM International (American Society for Testing and Materials)

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
- bw body weight
- CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)

CMR carcinogenic, mutagenic, reproductive toxic

- DMEL Derived Minimum Effect Level
- DNEL Derived No Effect Level
- dw dry weight
- e.g. for example (abbreviation of Latin 'exempli gratia'), for instance

EC European Community

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



Page 26 of 26 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 27.05.2021 / 0003 Replacing version dated / version: 13.11.2020 / 0002 Valid from: 27.05.2021 PDF print date: 02.06.2021 4F-Sealing 1K-PUR V 6 kg Art.: 9095829

EVAL Ethylene-vinyl alcohol copolymer

- Fax. Fax number
- gen. general
- 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
- IUCLID International Uniform Chemical Information Database

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)
- LQ Limited Quantities
- MARPOL International Convention for the Prevention of Marine Pollution from Ships
- n.a. not applicable
- n.av. not available
- n.c. not checked
- n.d.a. no data available
- 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.