Bondtec 602

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

Bondtec 602

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

Relevant identified uses of the substance or mixture:

Uses advised against:

No information available at present

1.3 Details of the supplier of the safety data sheet

Fola Abfülltechnik GmbH Industriestraße 55 D-40822 Mettmann Tel.: +49 2104 28680-10 Fax: +49 2104 28680-20 www.fola-abfuelltechnik.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:

Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (WIC)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Hazard class	Hazard category	Hazard statement
Eye Irrit.	2	H319-Causes serious eye irritation.
STOT SE	3	H335-May cause respiratory irritation.
Skin Irrit.	2	H315-Causes skin irritation.
Resp. Sens.	1	H334-May cause allergy or asthma
		symptoms or breathing difficulties if inhaled.
Skin Sens.	1	H317-May cause an allergic skin reaction.
Carc.	2	H351-Suspected of causing cancer.
STOT RE	2	H373-May cause damage to organs through prolonged or repeated exposure by
		inhalation (respiratory system)

2.2 Label elements

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





Danger

H319-Causes serious eye irritation. H335-May cause respiratory irritation. H315-Causes skin irritation. H334-May cause allergy or asthma symptoms or breathing difficulties if inhaled. H317-May cause an allergic skin reaction. H351-Suspected of causing cancer. H373-May cause damage to organs through prolonged or repeated exposure by inhalation (respiratory system).

P201-Obtain special instructions before use. P260-Do not breathe vapours or spray. P280-Wear protective gloves / protective clothing / eye protection / face protection. P284-Wear respiratory

protection.

P302+P352-IF ON SKIN: Wash with plenty of water / soap. P304+P340-IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313-IF exposed or concerned: Get medical advice / attention.

EUH204-Contains isocyanates. May produce an allergic reaction.

4,4'-methylenediphenyl diisocyanate
Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl

Methylenediphenyl diisocyanate, modified

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not

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

SECTION 3: Composition/information on ingredients

3.1 Substance

3.2 Mixture

and o-(p-isocyanatobenzyl)phenyl isocyanate

Registration number (REACH)	01-2119457015-45-XXXX
Index	
EINECS, ELINCS, NLP	905-806-4 (REACH-IT List-No.)
CAS	
content %	5-<15
Classification according to Regulation (EC) 1272/2008	Skin Irrit. 2, H315
(CLP)	Skin Sens. 1, H317
	Eye Irrit. 2, H319
	Acute Tox. 4, H332
	Resp. Sens. 1, H334
	STOT SE 3, H335
	Carc. 2, H351
	STOT RE 2, H373 (respiratory system) (as

Methylenediphenyl diisocyanate, modified	
Registration number (REACH)	01-2119457013-49-XXXX
Index	
EINECS, ELINCS, NLP	500-040-3 (NLP)
CAS	25686-28-6
content %	5-<15
Classification according to Regulation (EC) 1272/2008	Skin Irrit. 2, H315
(CLP)	Skin Sens. 1, H317
	Eye Irrit. 2, H319
	Acute Tox. 4, H332
	Resp. Sens. 1, H334
	STOT SE 3, H335
	Carc. 2, H351
	STOT RE 2, H373 (respiratory system) (as
	inhalation)

4,4'-methylenediphenyl diisocyanate	
Registration number (REACH)	01-2119457014-47-XXXX
Index	615-005-00-9
EINECS, ELINCS, NLP	202-966-0
CAS	101-68-8
content %	1-<10
Classification according to Regulation (EC) 1272/2008	Acute Tox. 4, H332
(CLP)	Skin Irrit. 2, H315
	Eye Irrit. 2, H319
	Resp. Sens. 1, H334
	Skin Sens. 1, H317
	Carc. 2, H351
	STOT SE 3, H335
	STOT RE 2, H373 (respiratory system) (as
	inhalation)

Propylene carbonate	
Registration number (REACH)	01-2119537232-48-XXXX
Index	607-194-00-1
EINECS, ELINCS, NLP	203-572-1
CAS	108-32-7
content %	1-<5
Classification according to Regulation (EC) 1272/2008	Eye Irrit. 2, H319
(CLP)	

Dibutyltin dilaurate	
Registration number (REACH)	01-2119496068-27-XXXX
Index	050-030-00-3
EINECS, ELINCS, NLP	201-039-8
CAS	77-58-7
content %	0,1-<0,25
Classification according to Regulation (EC) 1272/2008	Muta. 2, H341
(CLP)	Repr. 1B, H360FD
	Skin Corr. 1C, H314
	Aquatic Acute 1, H400 (M=1)
	Aquatic Chronic 1, H410 (M=1)
	Skin Sens. 1, H317
	STOT SE 1, H370
	STOT RE 1, H372 (immune system)
	Eye Dam. 1, H318

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

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

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

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aiders should ensure they are protected! Never pour anything into the mouth of an unconscious person!

Inhalation

Remove person from danger area.
Supply person with fresh air and consult doctor according to symptoms

If the person is unconscious, place in a stable side position and consult a doctor. Respiratory arrest - Artificial respiration apparatus necessary.

Skin contact

Wipe off residual product carefully with a soft, dry cloth.

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

Dab away with polyethylene glycol 400

Eve contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water - call doctor immediately, have Data Sheet available.

Ingestion

Rinse the mouth thoroughly with water.

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

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1. The following may occur: Dematitis (skin inflammation) Drying of the skin.

Allergic contact eczema Discoloration of the skin

Irritant to mucosa of the nose and throat

Coughing Headaches

Effect on the central nervous system

Asthmatic symptoms

In case of sensitivity, concentrations below the limit value may already result in asthmatic symptoms

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

4.3 Indication of any immediate medical attention and special treatment needed

In case of irritation of the lungs, perform first-aid with controlled-dosage aen Pulmonary oedema prophylaxis Medical supervision necessary due to possibility of delayed reaction.

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media

Page 2 of 7
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 11.09.2019 / 0009
Replacing version dated / version: 29.03.2019 / 0008
Valid from: 11.09.2019
PDF print date: 04.06.2020
Rondfec 602 Chemical Name Dibutyltin dilaurate WEL-STEL: 0,2 mg/m3 (Sn) (tin compounds, organic) WEL-TWA: 0,1 mg/m3 (Sn) (tin compounds, organic) Monitoring procedures
BMGV: --compounds, organic) CO2 Extinction powder GB Chemical Name Silica, amorphous WEL-TWA: 6 mg/m3 (total inh. dust), WEL-STEL: --Unsuitable extinguishing media 2,4 mg/m3 (resp. dust) Monitoring procedures:
BMGV: ---5.2 Special hazards arising from the substance or mixture In case of fire the following can develop: Other information: GB Chemical Name Calcium carbonate Oxides of carbon Oxides of nitrogen Oxides 6 margers Isocyanates Hydrocyanic acid (hydrogen cyanide) Toxic gases Danger of bursting (explosion) when heated WEL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3 (total inhalable dust) Monitoring procedures: BMGV: ---WEL-STEL: Other information: 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 Full protection, if necessary.

Cool container at risk with water.

Dispose of contaminated extinction water according to official regulations **SECTION 6: Accidental release measures**

П	Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate									
	Area of application									
		Environmental	health	ptor	е					
		compartment								
П		Environment -		PNEC	1	mg/l				
Ш		freshwater								
Н		Environment -		PNEC	0,1	mg/l				
		marine								
		Environment - soil		PNEC	1	mg/kg				
		Environment -		PNEC	1	mg/l				
		sewage treatment								
		plant								

%:0,1-< 0.25

Content

Content

Area of application	Exposure route / Environmental compartment	Effect on health	Descri ptor	Valu e	Unit	Note
	Environment - freshwater		PNEC	1	mg/l	
	Environment -		PNEC	0,1	mg/l	
	marine Environment - sewage treatment plant		PNEC	1	mg/l	
	Environment - soil		PNEC	1	mg/kg dw	
	Environment - sporadic (intermittent) release		PNEC	10	mg/l	
Consumer	Human - oral	Short term, systemic effects	DNEL	20	mg/kg bw/day	
Consumer	Human - dermal	Short term, local effects	DNEL	17,2	mg/cm 2	
Consumer	Human - dermal	Short term, systemic effects	DNEL	25	mg/kg bw/day	
Consumer	Human - inhalation	Short term, local effects	DNEL	0,05	mg/m3	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	0,05	mg/m3	
Consumer	Human - inhalation	Long term, local effects	DNEL	0,02 5	mg/m3	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,02 5	mg/m3	
Workers / employees	Human - dermal	Short term, local effects	DNEL	28,7	mg/cm 2	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	50	mg/kg bw/day	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	0,1	mg/m3	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	0,1	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	0,05	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	0,05	mg/m3	

Area of application	Exposure route / Environmental compartment	Effect on health	Descri ptor	Valu e	Unit	Note
	Environment - sporadic (intermittent) release		PNEC	9	mg/l	
	Environment - marine		PNEC	0,09	mg/l	
	Environment - sediment, marine		PNEC	0,08 3	mg/l	
	Environment - soil		PNEC	0,81	mg/l	
	Environment - freshwater		PNEC	0,9	mg/l	
	Environment - sediment, freshwater		PNEC	0,83	mg/l	
	Environment - sewage treatment plant		PNEC	740 0	mg/l	
Consumer	Human - oral	Long term, systemic effects	DNEL	10	mg/kg	
Consumer	Human - dermal	Long term, systemic effects	DNEL	10	mg/kg	
Consumer	Human - inhalation	Long term, local effects	DNEL	10	mg/m3	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	17,4	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	70,5 3	mg/kg	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	176	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	20	mg/kg	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	20	mg/m3	

Dibutyltin dilaurate									
Area of application	Exposure route /	Effect on	Descri	Valu	Unit	Note			
	Environmental	health	ptor	е					
	compartment								
	Environment -		PNEC	0,05	mg/kg				
	sediment, freshwater				wet				
					weight				

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

If leakage occurs, dam up.
Resolve leaks if this possible without risk.

Prevent 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

ous earth, sawdust) and

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earlispose of according to Section 13.

Allow to stand for a few days in an unclosed container until reaction no longer occurs.

Keep moist.

Do not close packing drum. CO2 formation in closed tanks causes pressure to rise.

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

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

If applicable, suction measures at the workstation or on the processing machine necessary. Avoid contact with eves 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.

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Keep protected from direct sunlight and temperatures over 50°C.

Only store at temperatures from to .

Store in a dry place.

7.3 Specific end use(s) Adhesive

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

ദ

isocyanatobenzyl)phenyl isocyanate WEL-TWA: 0,02 mg/m3 (Isocyanates, WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) Wonlioring procedures: At the end of the period of exposure) Chemical Name Methylenediphenyl diisocyanate, modified Content WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) Monlioring procedures: WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) MEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) MIDHS 25/3 (Organic isocyanates in air — Laboratory method using sampling either onto 2-(1-methoxyphenylpiperazine coated glass fiber filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 ISO 16702 (Workplace air quality — determination impingers and liquid chromatography) - 2001 Chemical Name 4,4'-methylenediphenyl diisocyanate WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -N							
WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) all (as -NCO)) Monitoring procedures:	B Chemical	Name			enyl diisocyanate a	nd o-(p-	
all (as -NCO)) all (as -NCO)) All (as -NCO)) All (as -NCO) All (as -NCO)) Chemical Name Methylenediphenyl diisocyanate, modified Content %:5<<15 MGV: 1 µmol isocyanate, all (as -NCO)) Chemical Name Methylenediphenyl diisocyanate, modified MEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1-methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 All (as -NCO)) Chemical Name 4,4'-methylenediphenyl diisocyanate WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) MONITORING Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impringers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/00/2002-16 card 7-4 (2004) BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine of their information: Sen	_						%:5-<15
Monitoring procedures: Act the end of the period of exposure WEL-TWA: 0,02 mg/m3 (Isocyanate-derived diamine/mol creatinine in urine Other information: Sen (Isocyanates, all (as -NCO))		2 mg/m3 (Iso	ocyanates,		m3 (Isocyanates,		
At the end of the period of exposure) Chemical Name				all (as -NCO))			
At the end of the period of exposure) Chemical Name Methylenediphenyl diisocyanate, modified Content %:5~15 WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: MEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: MEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: MDHS 253 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1-methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 Monitoring procedures: WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 253 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impolated glass fibre filters followed by solvent desorption or into impolated glass fibre filters followed by solvent desorption or into impolated glass fibre filters followed by solvent desorption or into impolated glass fibre filters followed by solvent desorption or into impolated glass filter filters followed by solvent desorption or into impolated glass filter filters followed by solvent desorption or into impolated glass filter filters followed by solvent desorption or into impolated glass filter filters followed by solvent desorption or into impolated glass filter filters followed by solvent desorption or into impolated glass filter filters followed by solvent desorption or into impolated glass filter fi							
Chemical Name Methylenediphenyl diisocyanate, modified WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: MDHS 25/3 (Organic isocyanates in air — Laboratory method using sampling either onto 2-(1-methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 ISO 16702 (Workplace air quality — determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 Chemical Name 4.4'-methylenediphenyl diisocyanate Content %:1-<10 WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) MOHS 25/3 (Organic isocyanates, all (as -NCO)) MOHS 25/3 (Organic isocyanates in air — Laboratory method using sampling either onto 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air — Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004) BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information:				ne/mol creatinine in urine			
WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1-methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MGW: 1 µmol isocyanate-derived diamine/mol creatinine in urine At the end of the period of exposure) Chemical Name 4.4'-methylenediphenyl diisocyanate WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) MONITORIO (SOCYANATE) WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) MONITORIO (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004) BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: Sen	(At the end of the	period of ex	posure)		(Isocyanates, all	(as -NCO)))
WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1-methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MGW: 1 µmol isocyanate-derived diamine/mol creatinine in urine At the end of the period of exposure) Chemical Name 4.4'-methylenediphenyl diisocyanate WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) MONITORIO (SOCYANATE) WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) MONITORIO (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004) BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: Sen	Chamiaal	Nama	Mathudan	adiaband diigaayanata maa	difficult		Cantant
WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1-methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 ISO 16702 (Workplace air quality – determination of total isocyanate-derived diamine/mol creatinine in urine At the end of the period of exposure) Chemical Name 4,4'-methylenediphenyl diisocyanate 4,4'-methylenediphenyl diisocyanate WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) MOHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impries and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/00/2002-16 card 7-4 (2004)	GB Chemical	Name	ivietriyleri	ediprienyi diisocyanate, mod	illea		
all (as -NCO)) Monitoring procedures: MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1-methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 Monitoring procedures: WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) Workplace air quality – determination of total isocyanate with the end of the period of exposure) WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MOHS 25/3 (Organic isocyanates, are quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/00/2002-16 card 7-4 (2004)	WEL TW/A. 0.0	2 == =/==2 /1==		WEI CTEL . 0.07 2/	m2 /lanauanatan		%.5-<15
Monitoring procedures: MDHS 25/3 (Organic isocyanates in air — Laboratory method using sampling either onto 2-(1-methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 Other information:		z mg/ma (iso	ocyanates,		no (isocyanales,		
sampling either onto 2-(1-methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: At the end of the period of exposure) Chemical Name							
fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine At the end of the period of exposure) Chemical Name 4,4'-methylenediphenyl diisocyanate WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fiber filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004) BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: ————————————————————————————————————	ivionitoring proce	aures:					
- analysis using high performance liquid chromatography) - 1999 ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 SMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: At the end of the period of exposure) Chemical Name 4,4'-methylenediphenyl diisocyanate WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: SO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fiber filters followed by solvent desorption or into imprigers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/00/2002-16 card 7-4 (2004) SMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: Sen							
ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 At the end of the period of exposure) Chemical Name 4,4'-methylenediphenyl diisocyanate WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) Wonitoring procedures: ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fiber filters followed by solvent desorption or into imgers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004) BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information:							
isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 3MGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine At the end of the period of exposure) Chemical Name 4.4'-methylenediphenyl diisocyanate WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) Wonitoring procedures: ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fiber filters followed by solvent desorption or into impriers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004) 3MGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information:			-				
BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine At the end of the period of exposure) Chemical Name 4,4'-methylenediphenyl diisocyanate 4,4'-methylenediphenyl diisocyanate WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impigers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/00/2002-16 card 7-4 (2004) BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: Sen							
BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine At the end of the period of exposure) Content (At the end of the period of exposure) At the end of the period of exposure) WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as-NCO)) WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as-NCO)) Wonitoring procedures: ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and - liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fiber filters followed by solvent desorption or into imgress and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004) BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: Sen						henylpiper	azine and
At the end of the period of exposure) Chemical Name 4,4'-methylenediphenyl diisocyanate WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fiber filters followed by solvent desorption or into imprigers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/00/2002-16 card 7-4 (2004) BMGV: 1 µmol isocyanate-derived diamine/mol creatinne in urine Other information: Sen			-				
Chemical Name 4,4'-methylenediphenyl diisocyanate WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) Monitoring procedures: ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004) BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Chemical Name 4,4'-methylenediphenyl diisocyanates,				ne/mol creatinine in urine	Other information	n:	
WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) SO (16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004) SMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: Sen	(At the end of the	period of ex	posure)				
WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) SO (16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004) SMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: Sen			4.41 41-	described and differences to			0
WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as-NCO)) Monitoring procedures: ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004) BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: Sen	B Chemical	Name	4,4'-metn	ylenedipnenyi diisocyanate			
all (as -NCO)) All (as -NCO) All (as -NCO)	MEL TAKA: 0.0	0/ 0 /1		WEL OTEL: 0.07			%:1-<10
Monitoring procedures: ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004) BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: Sen		2 mg/m3 (Iso	ocyanates,		ns (Isocyanates,		
isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004) BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: Sen						L	
- liquid chromatography) - 2001 MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004) BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: Sen	Monitoring proce	dures:					
MDHS 25/3 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1- methoxyphenyl/piperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004) 3MGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: Sen						henylpiper	azine and
sampling either onto 2-(1- methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004) BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: Sen			-				
fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004) BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: Sen							
analysis using high performance liquid chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004) BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: Sen							
- EU project BČ/CEN/ENTR/000/2002-16 card 7-4 (2004) BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: Sen							
BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine Other information: Sen							
				EU project BC/CEN/ENTR	2/000/2002-16 card	7-4 (2004)	<u> </u>
(At the end of the period of exposure) (Isocyanates, all (as -NCO))	BMGV: 1 µmol	isocyanate-c	lerived diami	ne/mol creatinine in urine	Other information	n: Sen	
	(At the end of the	period of ex	posure)		(Isocyanates, all	(as -NCO)))
					,,	,	

Page 3 of 7
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 11.09.2019 / 0009
Replacing version dated / version: 29.03.2019 / 0008
Valid from: 11.09.2019
PDF print date: 04.06.2020
Rondler; 602

	Environment - freshwater		PNEC	0,00 046 3	mg/l	
	Environment - marine		PNEC	0,00 004 6	mg/l	
	Environment - sediment, marine		PNEC	0,00 5	mg/kg wet weight	
Consumer	Human - dermal	Short term, systemic effects	DNEL	0,5	mg/kg body weight/ day	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	0,02	mg/m3	
Consumer	Human - oral	Short term, systemic effects	DNEL	0,01	mg/kg body weight/ day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,08	mg/kg body weight/ day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,00 3	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,00 2	mg/kg body weight/ day	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	1	mg/kg body weight/ day	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	0,07	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,2	mg/kg body weight/ day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	0,01	mg/m3	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). (8) = Inhalable fraction (Directive 2017/164/EU, Directive 204/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g cretinine in urine (Directive 2004/37/CE). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).

(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 = "Biologicar Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

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

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

8.2 Exposure controls

8.2.1 Appropriate engineering controls

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

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

should be worn.

Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.

These are specified by e.g. BS EN 14042.

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

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable Wash hands before breaks and at end of work.

Weep away from food, drink and animal feedingstuffs.

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

Eye/face protection:

Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection: Chemical resistant protective gloves (EN 374). Recommended Protective nitrile gloves (EN 374). Minimum layer thickness in mm:

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

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

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:

Normally not necessary.

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

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer

8.2.3 Environmental exposure controls

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Paste, liquid. According to specification Characteristic Not determined Physical sta Colour: Odour: Odour threshold: pH-value: Not determined pH-value:
Melting point/freezing point:
Initial boiling point and boiling range:
Flash point:
Evaporation rate:
Flammability (solid, gas):
Lower explosive limit: Not determined Not determined n.a. Not determined Upper explosive limit: Not determined Vapour pressure:
Vapour density (air = 1):
Density:
Bulk density: Not determined Not determined ~1,52 g/ml (20°C) Not determined Solubility(ies)

Water solubility: Insoluble Partition coefficient (n-octanol/water): Not determined Auto-ignition temperature: Decomposition temperature: n.a. Not determined 67000 - 93000 mPas (25°C)

Viscosity: Explosive properties: Product is not explosive

Nο

9.2 Other information

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

SECTION 10: Stability and reactivity

10.1 Reactivity

10.2 Chemical stability

er storage and handling.

10.3 Possibility of hazardous reactions Exothermic reaction possible with: Alcohols

Amines

Bases

Acids

Carbon dioxide CO2 formation in closed tanks causes pressure to rise. Pressure increase will result in danger of bursting

10.4 Conditions to avoid

Protect from humidity

Polymerisation due to high heat is possible. T > 260°C

10.5 Incompatible materials

Acids

Bases

Amines Alcohols

10.6 Hazardous decomposition products

See also section 5.2
No decomposition when used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

cts, see Section 2.1 (classification)

Toxicity / effect	Endpo	Value	Unit	Organis m	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:	ATE	>20	mg/l/ 4h			calculated value, Vapours
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate							
Toxicity / effect	Endpo	Value	Unit	Organis	Test method	Notes	
	int			m			
Acute toxicity, by oral	LD50	> 10000	mg/k	Rat			
route:			g				
Acute toxicity, by	LD50	> 9400	mg/k	Rabbit			
dermal route:			g				
Acute toxicity, by inhalation:	LC50	0,49	mg/l/ 4h	Rat		Mist, Dust:, Does not conform with EU classificatio n.	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosio	Irritant	

(B)
Page 4 of 7
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 11.09.2019 / 0009
Replacing version dated / version: 29.03.2019 / 0008
Valid from: 11.09.2019 Specific target organ Aerosol toxicity - repeated (Combined Analogous exposure (STOT-RE): Chronic conclusion Toxicity/Carcinog enicity Studies) from: 11.09.2019 print date: 04.06.2020 Specific target organ Target organ(s): respiratory Bondtec 602 toxicity - single exposure (STOT-SE), Respiratory or skin Guinea OECD 406 (Skin Yes inhalative: system. sensitisation (inhalation Irritation of and skin the respiratory contact) Negative Germ cell Regulation (EC) Specific target organ mutagenicity: la 440/2008 Target toxicity - repeated exposure (STOT-RE), organ(s): respiratory typhimuri um B.13/B.14 (REVERSE MUTATION inhalat.: system, TEST USING Positive BACTERIA) OECD 474 Rat Propylene carbonate
Toxicity / effect Germ cell Negative mutagenicity: (Mammalian Endpo Value Unit Organis Test method Notes Erythrocyte Micronucleus int LD50 Acute toxicity, by oral OECD 401 mg/ route: g (Acute Oral Test) OECD 453 Rat Carcinogenicity Carc. 2 Toxicity) OECD 402 LD50 mg/k g (Combined Acute toxicity, by >2000 Rahhit Chronic Toxicity/Carcinog (Acute Dermal OECD 404 enicity Studies) Not irritant corrosion/irritation: (Acute Dermal Methylenediphenyl diisocyanate, modified
Toxicity / effect Endpo Value Irritation/Corrosio Unit Organis Test method Notes n) OECD 405 Serious eye damage/irritation: Rahhit Irritant int LD50 m Rat >2000 OFCD 401 (Acute Eye Irritation/Corrosio mg/ Analogous route: q (Acute Oral conclusion Toxicity) OECD 404 Skin Irrit. 2 Skin Rabbit Respiratory or skin Human No (skin sensitisation: Germ cell mutagenicity: (Acute Dermal Irritation/Corrosio corrosion/irritation: contact) Negative OFCD 47 (Bacterial Reverse n) OECD 405 Serious eye Eye Irrit. 2 damage/irritation: (Acute Eye Irritation/Corrosio Mutation Test) OECD 474 Germ cell Negative mutagenicity Mouse Erythrocyte Respiratory or skin (inhalation) Yes (skin Micronucleus sensitisation: Respiratory or skin Guinea OECD 406 (Skin Test) OECD 482 sensitisation: Germ cell Sensitisation) Regulation (EC) contact) Negative Germ cell Negative pig Salmonel mutagenicity (Gen. Tox. -440/2008 B.13/B.14 (REVERSE DNA Damage and Repair, Unscheduled la typhimuri mutagenicity: MUTATION **DNA Synthesis** TEST USING in Mammalian BACTERIA) OECD 474 Cells In Vitro) OECD 451 Germ cell Rat Negative Carcinogenicity Mouse Negative mutagenicity (Mammalian (Carcinogenicity Erythrocyte Studies) OECD 414 NOAE 1000 Micronucleus Reproductive toxicity mg/k Rat Negative Test) OECD 453 (Prenatal Specific target organ NOEC 0,2 Rat Developmental mg/n toxicity - repeated exposure (STOT-RE), Toxicity Study) Aspiration hazard: Symptoms: No Toxicity/Carcinog breathing inhalat.: enicity Studies) difficulties headaches gastrointes tinal disturbance 4,4'-methylenediphenyl diisocyal
Toxicity / effect Endpo Value Unit Organis Test method int LD50 m Rat >2000 Regulation (EC) Acute toxicity, by oral mg/l Analogous conclusion 440/2008 B 1 dizziness. (ACUTE ORAL TOXICITY) OECD 402 Specific target organ toxicity - repeated exposure (STOT-RE), NOEL >5000 OFCD 408 (Repeated Dose 90-Day Oral LD50 >9400 Rabbi Acute toxicity, by mg/ Analogous dermal route q (Acute Dermal conclusion Toxicity) Toxicity Study in Acute toxicity, by ATF 1.5 Aerosol mg/l 4h Rodents) OECD 413 Expert judgement. mg/m 3 Specific target organ NOFC 100 Dust Mist (Subchronic Inhalation Toxicity - 90-Day toxicity - repeated exposure (STOT-RE), inhalat.: Acute toxicity, by mg/ (Acute Inhalation Toxicity) Does not inhalation: 4h conform with EU Study) Dibutyltin dilaurate Toxicity / effect Organis Notes Endpo Valu n. Skin Irrit. Skin Rabbi OECD 404 int LD50 m Rat OECD 401 2071 corrosion/irritation: (Acute Dermal Acute toxicity, by oral ma/k Irritation/Corrosio Analogous (Acute Oral conclusion Yes Toxicity) OECD 402 Respiratory or skin sensitisation:
Respiratory or skin Guinea Acute toxicity, by dermal route: LD50 >2000 mg/k (inhalation) Skin Sens. (Acute Dermal pig Mouse g OECD 429 (Skin Toxicity) sensitisation: Sensitisation Skin Rat Corrosive corrosion/irritation Local Lymph Node A Serious eye damage/irritation: Rahhi OFCD 405 Risk of OECD 474 Rat Germ cell Negative (Acute Eye Irritation/Corrosio serious mutagenicity: (Mammalian damage to Erythrocyte eyes. Sensitising n) OECD 406 (Skin Micronucleus Respiratory or skin Guinea Sensitisation) Test) OECD 489 (In sensitisation: Germ cell pig Germ cell Rat Negative Muta 2 Vivo Mammalian Alkaline Comet mutagenicity mutagenicity Negative Aspiration hazard Symptoms: respiratory Assay) OECD 471 Negative, Analogous conclusion distress. Germ cell Salmone (Bacterial Reverse mutagenicity: la diarrhoea typhimuri coughing, Mutation Test) OECD 453 Limited Carcinogenicity mucous (Combined evidence membrane of a carcinogeni c effect., Aerosol, Chronic irritation, Toxicity/Carcinog enicity Studies) vomiting. Analogous Silica, amorphous Toxicity / effect conclusion Aerosol, OECD 414 Reproductive toxicity NOAE mg/m Rat Endpo Value Unit Organis Test method Notes Analogous (Prenatal Developmental int LD50 OECD 423 Acute toxicity, by oral mg/l Toxicity Study) OECD 453 route: q (Acute Oral Specific target organ NOAE 0,2 Rat Aerosol, Toxicity - Acute Toxic Class mg/m toxicity - repeated exposure (STOT-RE): (Combined Analogous conclusion Chronic Chronic
Toxicity/Carcinog Acute toxicity, by dermal route: LD50 mg/ enicity Studies) (Acute Dermal g Toxicity)

Revision date / vers Replacing version d /alid from: 11.09.20 PDF print date: 04.0 Bondtec 602)19	0009	9		3, Annex II			12.2. Persistence and degradability:	BCF	28d	200	%	activated sludge	OECD 302 C (Inherent Biodegradab ility - Modified MITI Test (II)) OECD 305	Not to
Skin corrosion/irritation:					Rabbit	OECD 404 (Acute Dermal Irritation/Corrosio n)	Not irritant	Bioaccumulative potential:	BOF		200			(Bioconcentr ation - Flow- Through Fish Test)	exped
Serious eye lamage/irritation:					Rabbit	OECD 405 (Acute Eye Irritation/Corrosio n)	Not irritant	12.1. Toxicity to fish:	LC50	96h	>10 00	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
Germ cell nutagenicity:						OECD 471 (Bacterial Reverse Mutation Test)	Negative	12.1. Toxicity to daphnia:	NOEC/N OEL	21d	>=1 0	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproductio	
Aspiration hazard:							No	Toxicity to	EC50	3h	>10	mg/l	activated	n Test) OECD 209	
Calcium carbonate		Val	1	Unit	Organis	Test method	Notes	bacteria:	2000	011	0	mg/	sludge	(Activated Sludge,	
oxicity / effect	Endpo int				m		Notes							Respiration	
Acute toxicity, by or oute:		>20		mg/k g	Rat	OECD 420 (Acute Oral toxicity - Fixe Dose Procedure)								Inhibition Test (Carbon and	
Acute toxicity, by lermal route:	LD50	>20	000	mg/k g	Rat	OECD 402 (Acute Dermal Toxicity)								Ammonium Oxidation))	
Acute toxicity, by halation:	LC50	>3		mg/l/ 4h	Rat Rabbit	OECD 403 (Acute Inhalation Toxicity) OECD 404	Not irritant	4,4'-methylenedip Toxicity / effect Other	Endpoin t	Tim e	Valu e 0,02	Unit	Organism	Test method	Note
corrosion/irritation:					Kabbit	(Acute Dermal Irritation/Corrosio n)	Not iiitant	information: Other information:	(Henry)		29				Acco to
Serious eye lamage/irritation:					Rabbit	OECD 405 (Acute Eye Irritation/Corrosio	Not irritant, Mechanical irritation								expe avail to da
Respiratory or skin ensitisation: Germ cell						n) in vitro	possible. No (skin contact) Negative								polyc ide is and r degra
nutagenicity: Carcinogenicity:							Negative, administere d as Ca-								., Wit wate the interf
Reproductive toxicit	y:						lactate Negative, administere								trans slowl forma
							d as Ca- carbonate								of Co into a insol react
Possibly more infor					cal infor										prode with melti
Sondtec 602 Toxicity / effect	Endpoin	Tim	Valu	Unit	Organism		Notes								point (poly
2.1. Toxicity to	t	e	e	01111	Organism	method	n.d.a.	12.1. Toxicity to fish:	LC50	96h	>10 00	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity	Anal- conc
2.1. Toxicity to aphnia: 2.1. Toxicity to							n.d.a.	12.2. Persistence and		28d	0	%		Test) OECD 302 C (Inherent	Not biode
							····a.a.				l .			l 5.'	
Ilgae: 2.2. Persistence and legradability:							n.d.a.	degradability:						Biodegradab ility - Modified MITI Test	wate the
2.2. Persistence and legradability: 2.3. Bioaccumulative botential:							n.d.a.	degradability:						ility -	water the interf trans slowl forma
2.2. Persistence and legradability: 2.3. Bioaccumulative							n.d.a.	degradability:						ility - Modified MITI Test	water the interf trans slowl forma of CC into a insole
2.2. Persistence and legradability: 2.3. Bioaccumulative potential: 2.4. Mobility in oil: 2.5. Results of							n.d.a. n.d.a.	degradability:						ility - Modified MITI Test	interf trans slowl forma of CC into a insolu react produ with a meltii
2.2. Persistence and degradability: 2.3. Sioaccumulative solutential: 2.4. Mobility in oil: 2.5. Results of BT and vPvB sssessment 2.6. Other diverse effects:	4,4'-methylene Endpoin	Tim	Valu	yanate ar Unit	od o-(p-isocy:		n.d.a. n.d.a. n.d.a. n.d.a.	degradability:						ility - Modified MITI Test	wate the interf trans slowl form of CC into a insol react prodd with melti point (poly mide
2.2. eversistence and degradability: 2.3. Sioaccumulative obtential: 2.4. Mobility in oil: 2.5. Results of BBT and vPvB issessment 2.6. Other deverse effects:						Test method OECD 302 C (Inherent Biodegradab	n.d.a. n.d.a. n.d.a. n.d.a. n.d.a.	degradability:						ility - Modified MITI Test	wate the interference interference into a insol react product with a meltit point (poly mide Accord to experence interference interfere
2.2. eversistence and elegradability: 2.3. slicoaccumulative otential: 2.4. Mobility in oil: 2.5. Results of library and vPvB BST and v	Endpoin t	Tim e	Valu e 0	Unit	Organism activated	Test method OECD 302 C (Inherent	n.d.a. n.d.a. n.d.a. n.d.a. n.d.a. socyanate Notes	degradability:						ility - Modified MITI Test	wate the interference interference interference into a insol react produl with a melti point (polly mide Accord to expect avail to da polycide is and a
2.2. versistence and egradability: 2.3. ioaccumulative otential: 2.4. Mobility in oil: 2.5. Results of BT and vPvB ssessment 2.6. Other dverse effects: deaction mass of oxicity / effect 2.2. ersistence and egradability: 2.3. ioaccumulative otential:	Endpoin t	Tim e 28d	Valu e	%	Organism activated sludge	Test method OECD 302 C (Inherent Biodegradab ility - Modified MITI Test (III))	n.d.a. n.d.a. n.d.a. n.d.a. n.d.a.	12.1. Toxicity to	EC50	24h	>10	mg/l	Daphnia manna	iiity - Modified MITI Test (II))	wate the interference of Color
2.2. eversistence and elegradability: 2.3. Sloaccumulative obtential: 2.4. Mobility in oil: 2.5. Results of BT and vPvB issessment 2.6. Other diverse effects: Reaction mass of foxicity / effect 2.2. eversistence and elegradability: 2.3. Bloaccumulative obtential: 2.1. Toxicity to sh:	BCF	7im e 28d 96h	Valu e 0 200 200 > 100 0	Wnit %	Organism activated sludge	Test method OECD 302 C (Inherent Biodegradab iity - Modified MITI Test (II)) DIO OECD 203 (Fish, Acute Toxicity Test)	n.d.a. n.d.a. n.d.a. n.d.a. n.d.a. Notes	12.1. Toxicity to daphnia:			00		magna	Jilty - Modified MITI Test (II)) OECD 202 (Daphnia sp. Acute Immobilisati on Test)	wate the interference of City of Control of City of Ci
2.2. eversistence and degradability: 2.3. Sioaccumulative solicities of the soliciti	Endpoin t	Tim e 28d	Valu e 0 200 200	%	Organism activated sludge Brachydar	Test method OECD 302 C (Inherent Biodegradab ility - Modified MITITest (III) OECD 203 (Fish, Acute Toxicity Test) OECD 211 (Daphnia magna Reproductio	n.d.a. n.d.a. n.d.a. n.d.a. n.d.a. Notes	12.1. Toxicity to	EC50 NOEC/N OEL	24h		mg/l		OECD 202 (Daphnia sp. Acute Immobilisati on Test) OECD 202 (Daphnia sp. Acute Immobilisati on Test) OECD 202 (Daphnia sp. Acute Immobilisati on Immobilisati on Immobilisati on Immobilisati on Immobilisati on Immobilisati	water the interf trans slowl forma of CC into a insolu react produ with a meltiin point (polyr mide Acco
2.2. 2.2. 2.3. 3. 3. 3. 4. 4. 4. 4.	BCF LC50 NOEC/N	7im e 28d 96h	Valu e 0 200 200 > 100 0	Wnit %	activated sludge Brachydar rerio Daphnia	Test method OECD 302 C (Inherent Biodegradab ility - Modified MITI Test (II)) Dio OECD 203 (Fish, Acute Toxicity Test) OECD 211 (Daphnia magna Reproductio n Test) OECD 202 (Daphnia sp. Acute Toxicity Acute Toxicity Test)	n.d.a. n.d.a. n.d.a. n.d.a. n.d.a. Notes	12.1. Toxicity to daphnia:	NOEC/N		00		magna Daphnia	OECD 202 (Daphnia sp. Acute Immobilisati on Test) OECD 202 (Daphnia sp. Acute Immobilisati on Test) OECD 202 (Daphnia sp. Acute sp. Acute Immobilisati on Sp. Acute Immobilisati on Sp. Acute Immobilisati on Sp. Acute sp. Acute	wate the the interference of CC of C
2.2. Persistence and legradability: 2.3. Sloaccumulative sotential: 2.4. Mobility in oil: 2.5. Results of PBT and vPvB issessment 2.6. Other deverse effects: Reaction mass of Poxicity / effect 2.2. Persistence and legradability: 2.1. Toxicity to sh: 2.1. Toxicity to laphnia: 2.1. Toxicity to laphnia: Poxicity to socious of the persistence and legradability: 2.1. Toxicity to laphnia: 2.2. Toxicity to laphnia: 2.3. Toxicity to laphnia: 2.3. Toxicity to laphnia: 2.4. Toxicity to laphnia: 2.5. Toxicity to laphn	BCF LC50 NOEC/N OEL	96h	Value 0 0 200 > 100 0 > 100 0 > 100	mg/l	Organism activated sludge Brachydar rerio Daphnia magna Daphnia magna	Test method OECD 302 C (Inherent Biodegradab ility - Modified MITI Test (III) OECD 203 (Fish, Acute Toxicity Test) OECD 211 (Daphnia magna Reproductio n Test) OECD 202 (Daphnia sp. Acute Immobilisati on Test) OECD 209	n.d.a. n.d.a. n.d.a. n.d.a. n.d.a. Notes	12.1. Toxicity to daphnia: 12.1. Toxicity to daphnia: 12.3. Bioaccumulative	NOEC/N OEL		>10		magna Daphnia	OECD 202 (Daphnia sp. Acute Immobilisati on Test) OECD 202 (Daphnia sp. Acute Immobilisati on Test) OECD 202 (Daphnia sp. Acute Immobilisati on Immobilisati on Immobilisati on Immobilisati on Immobilisati on Immobilisati	watet the interfuranses slowly formation forma
2.2. Persistence and degradability: 2.3. Bioaccumulative otential: 2.4. Mobility in oil: 2.5. Results of PBT and vPvB ssessment 2.6. Other dverse effects: Reaction mass of Poxicity / effect 2.2. Persistence and degradability: 2.3. Bioaccumulative otential: 2.1. Toxicity to sh: 2.1. Toxicity to aphnia: 2.2. 2.3. 3. 3. 3. 3. 3. 3. 3. 3. 3.	BCF LC50 NOEC/N OEL EC50	96h 21d 24h	Value 0 200 >> 100 0 >100 0 >100 0	mg/l mg/l	activated sludge Brachydar rerio Daphnia magna Daphnia magna	Test method OECD 302 C (Inherent Biodegradab ility - Modified MTI Test (III) OECD 203 (Fish, Acute Toxicity Test) OECD 211 (Daphnia magna Reproductio n Test) OECD 202 (Daphnia sp. Acute Immobilisati on Test) OECD 209 (Activated Sludge, Respiration Inhibition	n.d.a. n.d.a. n.d.a. n.d.a. n.d.a. Notes	12.1. Toxicity to daphnia: 12.1. Toxicity to daphnia: 12.3. Bioaccumulative potential:	NOEC/N OEL		>10 >10 5,22		magna Daphnia	Jility - Modified MITI Test (II)) OECD 202 (Daphnia sp. Acute Immobilisati on Test) OECD 202 (Daphnia sp. Acute Immobilisati on Test)	watet the interfuransses slowly formation formation formation formation melti priont melti na va avail adegri Anal conc
2.2. Persistence and degradability: 2.3. Bioaccumulative otential: 2.4. Mobility in oil: 2.5. Results of PBT and vPvB ssessment 2.6. Other dverse effects: Reaction mass of Poxicity / effect 2.2. Persistence and degradability: 2.3. Bioaccumulative otential: 2.1. Toxicity to sh: 2.1. Toxicity to aphnia: 2.2. 2.3. 3. 3. 3. 3. 3. 3. 3. 3. 3.	BCF LC50 NOEC/N OEL EC50	96h 21d 24h	Value 0 200 >> 100 0 >100 0 >100 0	mg/l mg/l	Organism activated sludge Brachydar rerio Daphnia magna Daphnia magna	Test method OECD 302 C (Inherent Biodegradab ility - Modified MITI Test (III) OECD 203 (Fish, Acute Toxicity Test) OECD 211 (Daphnia magna Reproductio n Test) OECD 202 (Daphnia sp. Acute Immobilisati on Test) OECD 209 (Activated Sludge, Respiration	n.d.a. n.d.a. n.d.a. n.d.a. n.d.a. Notes	12.1. Toxicity to daphnia: 12.1. Toxicity to daphnia: 12.3. Bioaccumulative potential:	NOEC/N OEL	21d	>10 >10 5,22	mg/l	magna Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisati on Test) OECD 202 (Daphnia sp. Acute Immobilisati on Test) OECD 202 (Daphnia sp. Acute Immobilisati on Test) OECD 201 (Alga, Growth Inhibition	watet the interfuransses slowly formation formation formation formation melti priont melti na va avail adegri Anal conc
2.2. Persistence and legradability: 2.3. Bioaccumulative obtential: 2.4. Mobility in oil: 2.5. Results of BET and vPvB issessment 2.6. Other idverse effects: Reaction mass of oxicity / effect 2.2. Persistence and degradability: 2.3. Bioaccumulative obtential: 2.1. Toxicity to ish: 2.1. Toxicity to 2.2. 2.3. 2.3. 2.3. 2.4. 2.5. 2.5. 2.5. 2.6. 2.6. 2.7. 2.7. 2.8. 2.9. 2.9. 2.9. 2.9. 2.9. 2.9. 2.9. 2.9. 2.9. 2.9. 2.1. 2.1. Toxicity to 2.1. 2.1. Toxicity to	BCF LC50 NOEC/N OEL EC50	96h 21d 3h	2000	mg/l mg/l	Organism activated sludge Brachydar rerio Daphnia magna Daphnia magna	Test method OECD 302 C (Inherent Biodegradab ility - Modified MITI Test (III) OECD 203 (Fish, Acute Toxicity Test) OECD 211 (Daphnia magna Reproductio n Test) OECD 202 (Daphnia sp. Acute Immobilisati on Test) OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and	n.d.a. n.d.a. n.d.a. n.d.a. n.d.a. Notes	12.1. Toxicity to daphnia: 12.1. Toxicity to daphnia: 12.3. Bioaccumulative potential:	NOEC/N OEL	21d	>10 >10 5,22	mg/l	magna Daphnia magna Desmodesm us	OECD 202 (Daphnia sp. Acute Immobilisati on Test) OECD 202 (Daphnia sp. Acute Immobilisati on Test) OECD 202 (Daphnia sp. Acute Immobilisati on Test)	watete the interf trans slowl format format of CC into a insoli react produ with i melti point to da polyc ide is apolyc ide is ad concl Anala concl Anala concl Anot ioloj acu on poter has h expe expe expe expe expe ide is anot ioloj acu on poter (Logf (L

Page 6 of 7
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 11.09.2019 / 0009
Replacing version dated / version: 29.03.2019 / 0008
Valid from: 11.09.2019
PDF print date: 04.06.2020
Rondfec 602 OECD 207 Toxicity to EC50 14d >10 00 Eisenia Analogous foetida (Farthworm conclusion Acute Toxicity Tests) OECD 209 Toxicity to EC50 3h >10 mg/l activated Analogous conclusion (Activated Sludge, Respiration Inhibition bacteria sludge Test (Carbon and Ammonium Oxidation))
OECD 207 NOEC/N mg/k Analogous 100 annelids: OEL q terrestris (Earthworm, conclusion Acute Toxicity Propylene carbonate
Toxicity / effect Endpoin Tim Valu Unit Notes Organism Test >10 00 >10 00 method 92/69/EC 12.1. Toxicity to 96h I C50 Cyprinus caprio Daphnia fish: 12.1. Toxicity to EC50 48h mg/l daphnia: magna (Daphnia sp. Acute Immobilisati on Test) OECD 201 12.1. Toxicity to EC50 mg/ algae: (Alga, Growth Inhibition subspicatus Test)
OECD 301
B (Ready
Biodegradab
ility - Co2 Persistence and biodegrada ble29d -87-7 degradability: Evolution Test)
OECD 301 DOC Persistence and 100 A (Ready Biodegradab ility - DOC Die-Away degradability: Test) Log Pow Bioaccumu 0,48 Bioaccumulative ation is potential: unlikely (LogPow < 1)., calculated value No PBT .5. Results of PBT and vPvB substance, No vPvB Toxicity to EC10 16h 256 Pseudomon DIN 38412 mg/l 19 bacteria: Other as putida AOX Does not

							water.
Dibutyltin dilaurate							
Toxicity / effect	Endpoin t	Tim e	Valu e	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC0	96h	3,1	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	saturated solution
12.1. Toxicity to daphnia:	EC50	48h	<1	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisati on Test)	saturated solution
12.1. Toxicity to algae:	EC50	72h	>1	mg/l	Desmodesm us subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	22	%		OECD 301 F (Ready Biodegradab ility - Manometric Respirometr y Test)	Not readily biodegrada ble
12.3. Bioaccumulative potential:	BCF		1,49 -3,7			OECD 305 (Bioconcentr ation - Flow- Through Fish Test)	
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

Unit

mg/l

mg/

Organism

rerio

Daphnia

magna

Brachydanio

Endpoin

EC0

ECO

12.1. Toxicity to

12.1. Toxicity to

daphnia:

Tim

e 96h

24h

e >10 000

>10 00

information:

12.1. Toxicity to algae:	ErC50	72h	>=1 000 0	mg/l	Scenedesm us subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:							Inorganic products cannot be eliminated from water through biological purification methods.
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

Calcium carbonate								
Toxicity / effect	Endpoin	Tim	Valu	Unit	Organism	Test	Notes	
	t	e	e		- · g	method		
12.1. Toxicity to fish:	LC50	96h	>10 0	mg/l	Oncorhynch us mykiss	OECD 203 (Fish, Acute Toxicity Test)		
12.1. Toxicity to daphnia:	EC50	48h	>10 0	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisati on Test)		
12.1. Toxicity to algae:	EC50	72h	>14	mg/l	Desmodesm us subspicatus	OECD 201 (Alga, Growth Inhibition Test)		
Toxicity to bacteria:	EC50	3h	>10 00	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))		
Toxicity to annelids:					Eisenia foetida	OECD 207 (Earthworm, Acute Toxicity Tests)	Negative	
Water solubility:			0,01 4	g/l		,		

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

to 04 09 waste admessives and sealants containing on 08 05 01 waste isocyanates Recommendation: Sewage disposal shall be discouraged. Pay attention to local and national official regulations.

contain any organically bound halogens

which can

contribute

Notes

method OECD 203

(Fish. Acute

Toxicity Test) OECD 202

(Daphnia sp. Acute Immobilisati to the AOX value in waste

E.g. suitable incineration plant.
Hardened product:
E.g. dispose at suitable refuse site.

For contaminated packing material

Pay attention to local and na Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be decayed in the same manner as the substance. 15 01 10 packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

General statements

Transport by road/by rail (ADR/RID)

14.4. Packing group: n.a. n.a. Classification code:

LQ: 14.5. Environmental hazards: Not applicable

Tunnel restriction code Transport by sea (IMDG-code)

14.2. UN proper shipping name: 14.3. Transport hazard class(es): 14.4. Packing group: n.a. n.a. Marine Pollutant:

14.5. Environmental hazards: Not applicable

Transport by air (IATA)

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

14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

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

Observe restrictions:
Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)!

Regulation (EC) No 1907/2006, Annex XVII

Regulation (EC) No 1907/2006, Annex XVII
Reaction mass of 4.4"-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate
Methylenediphenyl diisocyanate, modified
4.4"-methylenediphenyl diisocyanate
Dibutyltin dilaurate
Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC): 0 %

Page 7 of 7
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 11.09.2019 / 0009
Replacing version dated / version: 29.03.2019 / 0008
Valid from: 11.09.2019

Bondtec 602

15.2 Chemical safety assessmentA chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections:

These details refer to the product as it is delivered. Employee instruction/training in handling hazardous materials is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Eye Irrit. 2, H319	Classification according to calculation procedure.
STOT SE 3, H335	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.
Carc. 2, H351	Classification according to calculation procedure.
STOT RE 2, H373	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). H314 Causes severe skin burns and eye damage. H360FD May damage fertility. May damage the unborn child. H373 May cause damage to organs through prolonged or repeated exposure by inhalation. H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

1317 Mey cause an integrit som it learnin. H318 Causes serious eye damage. H319 Causes serious eye irritation. H332 Hamful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.
H341 Suspected of causing genetic defects.
H351 Suspected of causing cancer.
H370 Causes damage to organs.
H372 Causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Eye Irrit. — Eye irritation STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation Skin Irrit. — Skin irritation

Resp. Sens. — Respiratory sensitization Skin Sens. — Skin sensitization

Skin Sens. — Skin sensitization
Carc. — Carcinogenicity
STOT RE — Specific target organ toxicity - repeated exposure
Acute Tox. — Acute toxicity - inhalation
Muta. — Germ cell mutagenicity
Repr. — Reproductive toxicity Skin Corr. — Skin corrosion

Aquatic Acute — Hazardous to the aquatic environment - acute Aquatic Chronic — Hazardous to the aquatic environment - chro STOT SE — Specific target organ toxicity - single exposure Eye Dam. — Serious eye damage

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)
Adsorbable organic halogen compounds

approx. approximately Art., Art. no.Article number

ASTM

ASTM International (American Society for Testing and Materials)
Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and BAM

Testing, Germany)

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

BSEF

bw CAS CLP

Genitary)
The International Bromine Council body weight
Chemical Abstracts Service
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 dw

Derived No Effect Level dry weight for example (abbreviation of Latin 'exempli gratia'), for instance

e.g. EC ECHA EEC EINECS ELINCS

to example (abbreviation of Latin exempling grade), for instance European Community
European Chemicals Agency
European Economic Community
European Inventory of Existing Commercial Chemical Substances
European List of Notified Chemical Substances

European Norms

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

et cetera

EU EVAL Fax.

European Union Ethylene-vinyl alcohol copolymer Fax number

gen. GHS Globally Harmonized System of Classification and Labelling of Chemicals

GWP IARC

Globally Harmonized System of Classification and Global warming potential International Agency for Research on Cancer International Air Transport Association International Bulk Chemical (Code) International Maritime Code for Dangerous Goods industrial inclusion. IBC (Code) IMDG-code

incl. IUCLID including, inclusive International Uniform Chemical Information Database

Limited Quantities
International Convention for the Prevention of Marine Pollution from Ships MARPOL

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

OECD Organisation for Economic Co-operation and Development

org. PBT organic persistent, bioaccumulative and toxic Polyethylene Predicted No Effect Concentration PNEC

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. 9xxxxxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifiers. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT. RID Regulation concerning the International Carriage of Dangerous Goods by Rail)

SVHC Substances of Very High Concern

Tel. Telephone
UN RTDG United Nations Peace.

VOC vPvB wwt Volatile organic compounds very persistent and very bioaccumulative wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they

not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

These statements were made by: Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

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