



Page 1 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 10.04.2017 / 0008

Replacing version dated / version: 03.07.2015 / 0007

Valid from: 10.04.2017 PDF print date: 12.04.2017 PU GLUE D4 500 G Art.: 9001939

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

PU GLUE D4 500 G Art.: 9001939

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

Adhesive

Sector of use [SU]:

SU 0 - Other

SU 1 - Agriculture, forestry, fishery

SU19 - Building and construction work

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Chemical product category [PC]:

PC 1 - Adhesives, sealants

Process category [PROC]:

PROC19 - Manual activities involving hand contact

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, Germany

Phone: +49 7940 141 256, Fax: +49 7940 141 9256

Stefan.Haug@bti.de, 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:

.__

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 classHazard categoryHazard statementAcute Tox.4H332-Harmful if inhaled.

STOT RE 2 H373-May cause damage to organs through prolonged or

repeated exposure.





Page 2 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 10.04.2017 / 0008

Replacing version dated / version: 03.07.2015 / 0007

Valid from: 10.04.2017 PDF print date: 12.04.2017 PU GLUE D4 500 G

Art.: 9001939

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.

2.2 Label elements

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



H332-Harmful if inhaled. H373-May cause damage to organs through prolonged or repeated exposure. 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.

P201-Obtain special instructions before use. P260-Do not breathe vapours or spray. P280-Wear protective gloves / protective clothing and eye protection / face protection. P284-Wear respiratory protection. P304+P340-IF INHALED: Remove person to fresh air and keep comfortable for breathing. P308+P313-IF exposed or concerned: Get medical advice / attention.

EUH204-Contains isocyanates. May produce an allergic reaction.

Methylenediphenyl diisocyanate

Oxirane, 2-methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'methylenebis[isocyanatobenzene]

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

n.a.

3.2 Mixture





Page 3 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 10.04.2017 / 0008

Replacing version dated / version: 03.07.2015 / 0007

Valid from: 10.04.2017 PDF print date: 12.04.2017 PU GLUE D4 500 G Art.: 9001939

Methylenediphenyl diisocyanate	
Registration number (REACH)	
Index	615-005-00-9
EINECS, ELINCS, NLP	247-714-0
CAS	26447-40-5
content %	45-<55
Classification according to Regulation (EC) 1272/2008	Carc. 2, H351
(CLP)	Acute Tox. 4, H332
	STOT RE 2, H373
	Eye Irrit. 2, H319
	STOT SE 3, H335
	Skin Irrit. 2, H315
	Resp. Sens. 1, H334
	Skin Sens. 1, H317

Oxirane, 2-methyl-, polymer with oxirane, ether with	
1,2,3-propanetriol (3:1), polymer with 1,1'-	
methylenebis[isocyanatobenzene]	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	
CAS	112898-48-3
content %	45-<55
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

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16. The substances named in this section are given with their actual, appropriate classification! For substances that are listed in appendix VI, table 3.1/3.2 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures

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.





Page 4 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 10.04.2017 / 0008

Replacing version dated / version: 03.07.2015 / 0007

Valid from: 10.04.2017 PDF print date: 12.04.2017 PU GLUE D4 500 G Art.: 9001939

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

Ingestion

Rinse the mouth thoroughly with water.

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

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1. In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

The following may occur:

Dermatitis (skin inflammation)

Drying of the skin.

Allergic contact eczema

Asthmatic symptoms

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

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

CO₂

Extinction powder

Water jet spray

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Oxides of nitrogen

Traces possible:

Isocyanates

Hydrocyanic acid (hydrogen cyanide)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

Full protection, if necessary.

Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep unprotected persons away.

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 from entering drainage system.





Page 5 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 10.04.2017 / 0008

Replacing version dated / version: 03.07.2015 / 0007

Valid from: 10.04.2017 PDF print date: 12.04.2017 PU GLUE D4 500 G Art.: 9001939

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

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.

Keep moist.

Do not close packing drum.

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

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

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

Avoid aerosol formation.

Avoid inhalation of the vapours.

Ensure good ventilation.

Avoid contact with eyes or skin.

Handle and open container with care.

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.

Avoid exposure to moist air and water.

Store cool.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Chemical Name	Methylenedip	henyl diisocyanate	Content %:45-<55
WEL-TWA: 0,02 mg/m3 (Isocyanates,		WEL-STEL: 0,07 mg/m3 (Isocyanates,	
all (as -NCO))		all (as -NCO))	
Monitoring procedures:	-		





Page 6 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 10.04.2017 / 0008

Replacing version dated / version: 03.07.2015 / 0007

Valid from: 10.04.2017 PDF print date: 12.04.2017 PU GLUE D4 500 G Art.: 9001939

BMGV: 1 µmol urinary diamine/mol creatinine in urine	Other information:	Sen (Isocyanates,
(Isocyanate, post task)	all (as -NCO))	

(B)	Oxirane, 2-m	Oxirane, 2-methyl-, polymer with oxirane, ether with 1,2,3-						
Chemical Name		(3:1), polymer with 1,1'-	, ,		%:45-<55			
	methylenebis	[isocyanatobenzene]						
WEL-TWA: 0,02 mg/m3 (Isocyanates,	WEL-STEL: 0,07 m	g/m3 (Isocyanates,					
all (as -NCO))		all (as -NCO))						
Monitoring procedures:		MDHS 25/3 (Organic is	ocyanates in air – Labo	ratory	method using			
	sampling either onto 2-(1-methoxyphenylpiperazine coated glass							
		fibre filters followed by	solvent desorption or i	nto imp	oingers and			
	-	analysis using high perfo	ormance liquid chroma	tograph	ıy) - 1999			
		ISO 16702 (Workplace a	air quality – determinat	ion of	total			
	isocyanate groups in air using 2-(1-methoxyphenylpiperazine and							
	- liquid chromatography) - 2001							
BMGV: 1 µmol urinary dia	Other information	: Sen	(Isocyanates,					
(Isocyanate, post task)			all (as -NCO))					

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | 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.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

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

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

Applies only if maximum permissible exposure values are listed here.

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

These are specified by e.g. EN 14042.

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

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

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

Eye/face protection:

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

Skin protection - Hand protection:

Chemical resistant protective gloves (EN 374).

Recommended





Page 7 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 10.04.2017 / 0008

Replacing version dated / version: 03.07.2015 / 0007

Valid from: 10.04.2017 PDF print date: 12.04.2017 PU GLUE D4 500 G Art.: 9001939

Protective nitrile gloves (EN 374)

Minimum layer thickness in mm:

0,4

Protective gloves in butyl rubber (EN 374).

Minimum layer thickness in mm:

0.7

Permeation time (penetration time) in minutes:

>=480

Protective hand cream recommended.

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

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

Skin protection - Other:

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

Respiratory protection:

If OES or MEL is exceeded.

Filter A (EN 14387), code colour brown

Filter B (EN 14387), code colour grey

At high concentrations:

Respiratory protection appliance (insulation device) (e.g. EN 137 or EN 138)

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 20°C Colour: Brown

Odour: Slightly, Characteristic
Odour threshold: Not determined





Page 8 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 10.04.2017 / 0008

Replacing version dated / version: 03.07.2015 / 0007

Valid from: 10.04.2017 PDF print date: 12.04.2017 PU GLUE D4 500 G Art.: 9001939

pH-value:

Melting point/freezing point:

Initial boiling point and boiling range:

Flash point:

Evaporation rate:

Not determined

Not determined

Not determined

Not determined

Flammability (solid, gas): n.a.

Lower explosive limit:

Upper explosive limit:

Vapour pressure:

Not determined

Not determined

Not determined

Not determined

Not determined

Not determined

1,13 g/cm3 (20°C)

Bulk density: n.a.

Solubility(ies):

Water solubility:

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

Not determined

Not determined

Not determined

Not determined

Viscosity: 8000 mPas (Brookfield) Explosive properties: Product is not explosive.

Oxidising properties: No

9.2 Other information

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

See also section 7.

Protect from humidity.

Strong heat

10.5 Incompatible materials

See also section 7.

Bases

Oxidizing agents

Reducing agent

Alcohols

Water

Developement of:

CO2

CO2 formation in closed tanks causes pressure to rise.

10.6 Hazardous decomposition products





Page 9 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 10.04.2017 / 0008

Replacing version dated / version: 03.07.2015 / 0007

Valid from: 10.04.2017 PDF print date: 12.04.2017 PU GLUE D4 500 G

Art.: 9001939

See also section 5.2

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).

Art.: 9001939						1
Toxicity / effect	Endpoi nt	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:	ATE	11	mg/l/4h			Vapours, calculated value
Acute toxicity, by inhalation:	ATE	1,5	mg/l/4h			Aerosol, calculated value
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.

Methylenediphenyl diisocyanate								
Toxicity / effect	Endpoi	Value	Unit	Organism	Test method	Notes		
	nt							
Acute toxicity, by oral	LD50	>2000	mg/kg	Rat				
route:								
Acute toxicity, by	LD50	>2000	mg/kg	Rabbit				
dermal route:								
Acute toxicity, by	LC50	0,49	mg/l/4h			Does not		
inhalation:						conform		
						with EU		
						classification		





Page 10 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 10.04.2017 / 0008

Replacing version dated / version: 03.07.2015 / 0007

Valid from: 10.04.2017 PDF print date: 12.04.2017 PU GLUE D4 500 G Art.: 9001939

Skin corrosion/irritation:	Rabbit	OECD 404 (Acute	Irritant
		Dermal	
		Irritation/Corrosio	
		n)	
Serious eye	Rabbit		Intensively
damage/irritation:			irritant
Symptoms:			asthmatic
			symptoms,
			coughing,
			headaches,
			mucous
			membrane
			irritation

SECTION 12: Ecological information

Possibly more infor	mation on env	ironment	al effects,	see Section	on 2.1 (classifica	tion).	
PU GLUE D4 500	G						
Art.: 9001939							
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:							





Page 11 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 10.04.2017 / 0008

Replacing version dated / version: 03.07.2015 / 0007

Valid from: 10.04.2017 PDF print date: 12.04.2017 PU GLUE D4 500 G Art.: 9001939

12.2. Persistence					With water
and degradability:					at the
and degradability.					interface,
					transforms
					slowly with formation of
					CO2 into a
					firm,
					insoluble
					reaction
					product with
					a high
					melting
					point
					(polycarbami
					de).
					According
					to .
					experience
					available to
					date,
					polycarbami
					de is inert
					and non-
10.2					degradable.
12.3. Bioaccumulative					n.d.a.
1					
potential:					n.d.a.
12.4. Mobility in soil:					II.u.a.
12.5. Results of					n.d.a.
PBT and vPvB					II.u.a.
assessment 12.6. Other					n.d.a.
adverse effects:					II.u.a.
Other information:					According
Other information.					to the recipe,
					contains no
					AOX.
Other information:					DOC-
Calci information.					elimination
					degree(comp
					lexing
					organic
					substance)>=
					80%/28d:
					n.a.
		1	1	L	

Methylenediphenyl diisocyanate								
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes	





Page 12 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 10.04.2017 / 0008

Replacing version dated / version: 03.07.2015 / 0007

Valid from: 10.04.2017 PDF print date: 12.04.2017 PU GLUE D4 500 G Art.: 9001939

12.1 5	7.050	0.41	1000		- · · ·	
12.1. Toxicity to	LC50	96h	>1000	mg/l	Brachydanio	
fish:			0		rerio	
12.1. Toxicity to	EC50	24h	>750	mg/l	Daphnia pulex	OECD 202
daphnia:						(Daphnia sp.
						Acute
						Immobilisatio
						n Test)
12.1. Toxicity to	LC0	72h	1640	mg/l	Scenedesmus	OECD 201
algae:					subspicatus	(Alga,
						Growth
						Inhibition
						Test)
Toxicity to	EC50	3h	>100	mg/l	activated	OECD 209
bacteria:					sludge	(Activated
						Sludge,
						Respiration
						Inhibition
						Test (Carbon
						and
						Ammonium
						Oxidation))

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no .:

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

08 05 01 waste isocyanates

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.

SECTION 14: Transport information

General statements

14.1. UN number:

n.a.

Transport by road/by rail (ADR/RID)





Page 13 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 10.04.2017 / 0008

Replacing version dated / version: 03.07.2015 / 0007

Valid from: 10.04.2017 PDF print date: 12.04.2017 PU GLUE D4 500 G Art.: 9001939

14.2. UN proper shipping name:

14.3. Transport hazard class(es):n.a.14.4. Packing group:n.a.Classification code:n.a.LQ:n.a.

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):n.a.14.4. Packing group:n.a.Marine Pollutant:n.a.

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: n.a.

14.5. Environmental hazards: 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:

Regulation (EC) No 1907/2006, Annex XVII

Methylenediphenyl diisocyanate

Comply with trade association/occupational health regulations.

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

Observe youth employment law (German regulation).

Observe law on protection of expectant mothers (German regulation).

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections: 2, 3, 8, 9, 11, 12, 15, 16

These details refer to the product as it is delivered.

Employee instruction/training in handling hazardous materials is required.

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





Page 14 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 10.04.2017 / 0008

Replacing version dated / version: 03.07.2015 / 0007

Valid from: 10.04.2017 PDF print date: 12.04.2017 PU GLUE D4 500 G Art.: 9001939

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Acute Tox. 4, H332	Classification according to calculation procedure.
STOT RE 2, H373	Classification according to calculation procedure.
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.

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).

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

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.

H351 Suspected of causing cancer.

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

Acute Tox. — Acute toxicity - inhalation

STOT RE — Specific target organ toxicity - repeated exposure

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

Carc. — Carcinogenicity

Any abbreviations and acronyms used in this document:

AC Article Categories

acc., acc. to according, according to

ACGIH American Conference of Governmental Industrial Hygienists

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

AOEL Acceptable Operator Exposure Level

AOX Adsorbable organic halogen compounds

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

ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)

BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)

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

BCF Bioconcentration factor

BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)



(GB

Page 15 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 10.04.2017 / 0008

Replacing version dated / version: 03.07.2015 / 0007

Valid from: 10.04.2017 PDF print date: 12.04.2017 PU GLUE D4 500 G Art.: 9001939

BHT Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol)

BMGVBiological monitoring guidance value (EH40, UK)

BOD Biochemical oxygen demand

BSEF Bromine Science and Environmental Forum

bw body weight

CAS Chemical Abstracts Service

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

Other Fluids

CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques

CIPACCollaborative International Pesticides Analytical Council

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

CMR carcinogenic, mutagenic, reproductive toxic

COD Chemical oxygen demand

CTFA Cosmetic, Toiletry, and Fragrance Association

DMEL Derived Minimum Effect Level

DNEL Derived No Effect Level

DOC Dissolved organic carbon

DT50 Dwell Time - 50% reduction of start concentration

DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)

dw dry weight

e.g. for example (abbreviation of Latin 'exempli gratia'), for instance

EC European Community

ECHA European Chemicals Agency

EEA European Economic Area

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)

ERC Environmental Release Categories

ES Exposure scenario

etc. et cetera

EU European Union

EWC European Waste Catalogue

Fax. Fax number

gen. general

GHS Globally Harmonized System of Classification and Labelling of Chemicals

GWP Global warming potential

HET-CAM Hen's Egg Test - Chorionallantoic Membrane

HGWPHalocarbon Global Warming Potential

IARC International Agency for Research on Cancer

IATA International Air Transport Association

IBC Intermediate Bulk Container

IBC (Code) International Bulk Chemical (Code)

IC Inhibitory concentration

IMDG-code International Maritime Code for Dangerous Goods

incl. including, inclusive

IUCLID International Uniform ChemicaL Information Database

LC lethal concentration



(GB

Page 16 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 10.04.2017 / 0008

Replacing version dated / version: 03.07.2015 / 0007

Valid from: 10.04.2017 PDF print date: 12.04.2017 PU GLUE D4 500 G Art.: 9001939

LC50 lethal concentration 50 percent kill

LCLo lowest published lethal concentration

LD Lethal Dose of a chemical LD50 Lethal Dose, 50% kill LDLo Lethal Dose Low

LOAEL Lowest Observed Adverse Effect Level

LOEC Lowest Observed Effect Concentration

LOEL Lowest Observed Effect Level

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

NIOSH National Institute of Occupational Safety and Health (United States of America)

NOAEC No Observed Adverse Effective Concentration

NOAEL No Observed Adverse Effect Level

NOEC No Observed Effect Concentration

NOEL No Observed Effect Level ODP Ozone Depletion Potential

OECD Organisation for Economic Co-operation and Development

org. organic

PAH polycyclic aromatic hydrocarbon PBT persistent, bioaccumulative and toxic

PC Chemical product category

PE Polyethylene

PNEC Predicted No Effect Concentration POCP Photochemical ozone creation potential

ppm parts per millionPROC Process categoryPTFE Polytetrafluorethylene

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)

REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.

RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)

SADT Self-Accelerating Decomposition Temperature

SAR Structure Activity Relationship

SU Sector of use

SVHC Substances of Very High Concern

Tel. Telephone

ThOD Theoretical oxygen demand

TOC Total organic carbon

TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances)

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative





Page 17 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 10.04.2017 / 0008

Replacing version dated / version: 03.07.2015 / 0007

Valid from: 10.04.2017 PDF print date: 12.04.2017 PU GLUE D4 500 G Art.: 9001939

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

WHO World Health Organization

wwt 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.