

SAFETY DATA SHEET***According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878****Revision date: 21.10.2021***1- IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/
UNDERTAKING****Product details****Trade name:** Polyurethane car body sealant**Article number:** 37511, 37521, 37531**Product form:** Mixture**Relevant identified uses of the substance or mixture and uses advised against****Relevant identified uses:** Intended for general public**Uses advised against:** No additional information available**Intended use:** Car refinishing product/Adhesives, sealants**Manufacturer/Supplier:**

Chamäleon GmbH

Rudolf-Diesel-Straße, 8a,

69115 Heidelberg

Germany

Further information obtainable from: Product Safety Department**Information in case of emergency:** + 49 70024112112 (CH)**2 – HAZARDS IDENTIFICATION****Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]:** Not classified**Adverse physicochemical, human health and environmental effects:**

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]:****Precautionary statements (CLP):** P102 - Keep out of reach of children.**EUH-statements:**

EUH204 - Contains isocyanates. May produce an allergic reaction.

EUH212 - Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.

Child-resistant fastening: Not applicable**Tactile warning:** Not applicable**Other hazards:**

This product does not contain any substance(s) classified as PBT or vPvB and does not contain

substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

3- COMPOSITION/INFORMATION ON INGREDIENTS

Substance: Not applicable

Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
xylene	(CAS-No.) 1330-20-7 (EC-No.) 215-535-7 (EC Index-No.) 601-022-00-9 (REACH-no) 01-2119488216-32	1 - 5	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315
Titanium dioxide	(CAS-No.) 13463-67-7 (EC-No.) 236-675-5 (REACH-no) 01-2119489379-17-0016	> 1	Not classified
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	(CAS-No.) 101-68-8 (EC-No.) 202-966-0 (EC Index-No.) 615-005-00-9 (REACH-no) 01-211945701447-0000	< 0.1	Carc. 2, H351 Acute Tox. 4 (Inhalation), 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

Specific concentration limits:

Name	Product identifier	Specific concentration limits
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	(CAS-No.) 101-68-8 (EC-No.) 202-966-0 (EC Index-No.) 615-005-00-9 (REACH-no) 01-211945701447-0000	(0.1 =<C <= 100) Resp. Sens. 1, H334 (5 =<C <= 100) Eye Irrit. 2, H319 (5 =<C <= 100) Skin Irrit. 2, H315 (5 =<C <= 100) STOT SE 3, H335

Full text of H-statements: see section 16

4- FIRST - AID MEASURES

Description of first aid measures

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact: Wash skin with plenty of water.

First-aid measures after eye contact: Rinse eyes with water as a precaution.

First-aid measures after ingestion: Call a poison center or a doctor if you feel unwell.

Most important symptoms and effects, both acute and delayed: No additional information available

Indication of any immediate medical attention and special treatment needed: Treat symptomatically

5- FIRE - FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: Water spray. Dry powder. Foam. Carbon dioxide.

Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire: Toxic fumes may be released.

Advice for firefighters

Protection during firefighting:

Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus.
Complete protective clothing.

6- ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures: Ventilate spillage area.

For emergency responders

Protective equipment:

Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Environmental precautions: Avoid release to the environment.

Methods and material for containment and cleaning up

Methods for cleaning up: Take up liquid spill into absorbent material.

Other information: Dispose of materials or solid residues at an authorized site.

Reference to other sections:

For further information refer to section 13.

7- HANDLING AND STORAGE

Precautions for safe handling

Precautions for safe handling:

Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures:

Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a well-ventilated place. Keep cool.

Specific end use(s)

No additional information available

8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

EU - Occupational Exposure Limits	
Local name	Xylene, mixed isomers, pure
IOELV TWA (mg/m ³)	221 mg/m ³
IOELV TWA (ppm)	50 ppm
IOELV STEL (mg/m ³)	442 mg/m ³
IOELV STEL (ppm)	100 ppm
Notes	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Austria - Occupational Exposure Limits	
Local name	Diphenylmethan-4,4'-diisocyanat
MAK (mg/m ³)	0.05 mg/m ³
MAK (ppm)	0.005 ppm
MAK Short time value (mg/m ³)	0.1 mg/m ³
MAK Short time value (ppm)	0.01 ppm
Remark (AT)	Sah
Regulatory reference	BGBI. II Nr. 186/2015
Belgium - Occupational Exposure Limits	
Local name	4,4'-Diisocyanate de diphénylméthane (MDI) # Difenylmethaan-4,4'-di-isocyanaat (MDI)
Limit value (mg/m ³)	0.052 mg/m ³
Limit value (ppm)	0.005 ppm
Short time value (mg/m ³)	442 mg/m ³
Short time value (ppm)	100 ppm

Bulgaria - Occupational Exposure Limits	
Local name	Ксилен (смес от изомери), чист
OEL TWA (mg/m ³)	221 mg/m ³
OEL TWA (ppm)	50 ppm
OEL STEL (mg/m ³)	442 mg/m ³
OEL STEL (ppm)	100 ppm
Croatia - Occupational Exposure Limits	
Local name	Ksilen (svi izomeri)
GVI (granična vrijednost izloženosti) (mg/m ³)	221 mg/m ³
GVI (granična vrijednost izloženosti) (ppm)	50 ppm
KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m ³)	442 mg/m ³
KGVI (kratkotrajna granična vrijednost izloženosti) (ppm)	100 ppm
Naznake (HR)	Direktiva: 2000/39/EZ. Napomena: Koža (razvrstana kao tvar koja nadražuje kožu (H315))
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 91/2018)
Croatia - Biological limit values	
Local name	Ksilen
Czech Republic - Occupational Exposure Limits	
Local name	Difenylmethan-4,4'-diisokyanát (1,1'-Methylenbis(4-isokyanatobenzen))
Expoziční limity (PEL) (mg/m ³)	0.05 mg/m ³
Expoziční limity (PEL) (ppm)	0.005 ppm
Expoziční limity (NPK-P) (mg/m ³)	0.1 mg/m ³
Expoziční limity (NPK-P) (ppm)	0.01 ppm
Remark (CZ)	I (dráždí sliznice (oči, dýchací cesty) resp. kůži), S (látka má senzibilizační účinek)
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (zpracovány změny č. 246/2018 Sb.)
Denmark - Occupational Exposure Limits	
Local name	Diphenylmethan-4,4'-diisocyanat (MDI; Methylenbis(phenylisocyanat))
Grænseværdie (langvarig) (mg/m ³)	0.05 mg/m ³
Grænseværdie (langvarig) (ppm)	0.005 ppm
Anmærkninger (DK)	E (betyder, at stoffet har en EF-grænseværdi); H (betyder, at stoffet kan optages gennem huden)

Regulatory reference	BEK nr 655 af 31/05/2018
Estonia - Occupational Exposure Limits	
Local name	4,4'-metüleendifenüül-diisotsüanaat (fenüülisotsüanaat)
OEL TWA (mg/m ³)	0.05 mg/m ³
OEL TWA (ppm)	0.005 ppm
OEL STEL (mg/m ³)	450 mg/m ³
OEL STEL (ppm)	100 ppm
OEL Ceiling (mg/m ³)	0.1 mg/m ³
OEL Ceiling (ppm)	0.01 ppm
Remark (ET)	S (Sensibiliseerivad ained), 2 (Arvutatud 5-minutisele kokkupuuteajale)
Regulatory reference	Vabariigi Valitsuse 18. septembri 2001. a määruse nr 293 (RT I, 30.11.2011, 5)
Finland - Occupational Exposure Limits	
Local name	Ksyleeni
HTP-arvo (8h) (mg/m ³)	220 mg/m ³
HTP-arvo (8h) (ppm)	50 ppm
HTP-arvo (15 min)	440 mg/m ³
HTP-arvo (15 min) (ppm)	100 ppm
Huomautus (FI)	iho
Regulatory reference	HTP-ARVOT 2018 (Sosiaali- ja terveysministeriö)
Finland - Biological limit values	
Local name	Ksyleeni
Finland - BLV	5 mmol/l Parametri: Virtsan metyylhippuurihappo - Näytteenottoajankohta: Työvuoronpäättyttyä
Regulatory reference	HTP-ARVOT 2018 (Sosiaali- ja terveysministeriö)
France - Occupational Exposure Limits	
Local name	4,4'-Diisocyanate de diphénylméthane
VME (mg/m ³)	0.1 mg/m ³
VME (ppm)	0.01 ppm
VLE (mg/m ³)	0.2 mg/m ³
VLE (ppm)	0.02 ppm
Note (FR)	Valeurs recommandées/admises; certaines ou toutes ces VLE s'entendent pour des concentrations mesurées sur une durée de 5 min; risque d'allergie respiratoire, substance classée cancérigène de catégorie 2
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)
Germany - Occupational Exposure Limits (TRGS 900)	
TRGS 900 Local name	4,4'-Methylendiphenyldiisocyanat

Occupational exposure limit value (mg/m ³)	0.05 mg/m ³ (E)
Occupational exposure limit value (ppm)	100 ppm
Limitation of exposure peaks	1;=2=(I)
TRGS 900 Remark	DFG;11;12;H;Sah;Y
TRGS 900 Regulatory reference	TRGS900
Germany - Biological limit values (TRGS 903)	
TRGS 903 Local name	Xylol (alle Isomere)
TRGS 903 Biological limit value	2000 mg/l Parameter: Methylhippur-(Tolur-) säure (alle Isomere) - Untersuchungsmaterial:U = Urin - Probenahmezeitpunkt: b) Expositionsende, bzw. Schichtende - Festlegung/Begründung: 11/2016 DFG
TRGS 903 Regulatory reference	TRGS 903
Gibraltar - Occupational Exposure Limits	
Name of agent	Xylene, mixed isomers, pure
Eight hours mg/m ³	221 mg/m ³
Eight hours ppm	50 ppm
Short-term mg/m ³	442 mg/m ³
Short-term ppm	100 ppm
Notation	Skin
Regulatory reference	Factories (Control of Chemical Agents at Work) Regulations 2003 (LN. 2018/181)
Greece - Occupational Exposure Limits	
Local name	Δισοκυανικός εστέρας του διφαιλυομεθάνιου (MDI)
OEL TWA (mg/m ³)	0.2 mg/m ³
OEL TWA (ppm)	0.02 ppm
OEL STEL (mg/m ³)	0.2 mg/m ³
OEL STEL (ppm)	0.02 ppm
Regulatory reference	Π.Δ. 90/1999
Hungary - Occupational Exposure Limits	
Local name	difenilmetán-4,4'-diizocianát (MDI)
AK-érték	0.05 mg/m ³
CK-érték	0.05 mg/m ³
Hungary - Biological limit values	
Local name	Xilol
Regulatory reference	25/2000. (IX. 30.) EüM-SZCSM együttes rendelet a munkahelyek kémiai biztonságáról
Ireland - Occupational Exposure Limits	
Local name	4,4'-Methylene-diphenyl diisocyanate (as —NCO)

OEL (8 hours ref) (mg/m ³)	221 mg/m ³
OEL (8 hours ref) (ppm)	0.005 ppm
OEL (15 min ref) (mg/m ³)	442 mg/m ³
OEL (15 min ref) (ppm)	100 ppm
Italy - Occupational Exposure Limits	
Local name	Xilene, isomeri misti, puro
OEL TWA (mg/m ³)	221 mg/m ³
OEL TWA (ppm)	50 ppm
OEL STEL (mg/m ³)	442 mg/m ³
OEL STEL (ppm)	100 ppm
Notes	pelle
Regulatory reference	Allegato XXXVIII del D.Lgs. 9 aprile 2008, n. 81 e s.m.i.
Latvia - Occupational Exposure Limits	
Local name	Ksilols (o-,m-,p-ksilols, dimetilbenzols)
OEL TWA (mg/m ³)	221 mg/m ³
OEL TWA (ppm)	50 ppm
OEL STEL (mg/m ³)	442 mg/m ³
OEL STEL (ppm)	100 ppm
Regulatory reference	Ministru kabineta 2007.gada 15.maija noteikumiem Nr.325
Lithuania - Occupational Exposure Limits	
Local name	Metileno bisfenilizocianatas (MDI)
IPRV (mg/m ³)	0.05 mg/m ³
IPRV (ppm)	0.005 ppm
TPRV (mg/m ³)	442 mg/m ³
TPRV (ppm)	100 ppm
NRV (mg/m ³)	0.1 mg/m ³
NRV (ppm)	0.01 ppm
Luxembourg - Occupational Exposure Limits	
Local name	Xylène, isomères mixtes, purs
OEL TWA (mg/m ³)	221 mg/m ³
OEL TWA (ppm)	50 ppm
OEL STEL (mg/m ³)	442 mg/m ³
OEL STEL (ppm)	100 ppm
Regulatory reference	Mémorial A N° 684 de 2018
Malta - Occupational Exposure Limits	
Local name	Xylene, mixed isomers, pure # Xylene, Isomeri mhallta, puri
OEL TWA (mg/m ³)	221 mg/m ³

OEL TWA (ppm)	50 ppm
OEL STEL (mg/m ³)	442 mg/m ³
OEL STEL (ppm)	100 ppm
Regulatory reference	S.L.424.24 (L.N.57 of 2018)
Netherlands - Occupational Exposure Limits	
Local name	Xyleen, o-, m-, p-isomeren
Grenswaarde TGG 8H (mg/m ³)	210 mg/m ³
Grenswaarde TGG 15MIN (mg/m ³)	442 mg/m ³
Poland - Occupational Exposure Limits	
Local name	Metylenobis(fenyloizocyjanian) (diizocyjanian 4,4'-metylenodifenylu)
NDS (mg/m ³)	0.03 mg/m ³
NDSch (mg/m ³)	0.09 mg/m ³
Remark (PL)	Skóra (Oznakowanie substancji notacją „skóra” oznacza, że wchłanianie substancji przez skórę może być tak samo istotne jak przy narażeniu drogą oddechową)
Regulatory reference	Dz. U. 2018 poz. 1286
Portugal - Occupational Exposure Limits	
Local name	Metilendifenilisocianato (MDI)
OEL TWA (ppm)	0.005 ppm
OEL STEL (ppm)	150 ppm
Regulatory reference	Norma Portuguesa NP 1796:2014
Portugal - Biological limit values	
Local name	Xilenos (graus técnico e comercial)
Portugal (BEI)	1.5 g/g creatinine Parâmetro: Ácidos (o, m, p)-metilhipúricos - Meio: urina - Momento da amostragem: Fim do turno
Regulatory reference	Norma Portuguesa NP 1796:2014
Romania - Occupational Exposure Limits	
Local name	4,4'-Metilendifenil diizocianat
OEL TWA (mg/m ³)	221 mg/m ³
OEL TWA (ppm)	50 ppm
OEL STEL (mg/m ³)	0.15 mg/m ³
OEL STEL (ppm)	100 ppm
Regulatory reference	Hotărârea nr. 584/2018
Romania - Biological limit values	
Local name	Xilen
Romania - BLV	3 g/l Indicator biologic: Acid metilhipuric - Material biologic: urină - Momentul recoltării: sfârșit schimb
Regulatory reference	Hotărârea nr. 584/2018

Serbia - Occupational Exposure Limits	
Local name	ксилен, мешани изомери, чист
OEL TWA (mg/m ³)	221 mg/m ³
OEL TWA (ppm)	50 ppm
OEL STEL (mg/m ³)	442 mg/m ³
OEL STEL (ppm)	100 ppm
Slovakia - Occupational Exposure Limits	
Local name	Izokyanát: 4,4'-Metyléndifenyilizokyanát (MDI)
NPHV (priemerná) (mg/m ³)	0.03 mg/m ³
NPHV (priemerná) (ppm)	0.002 ppm
OEL STEL (mg/m ³)	442 mg/m ³
OEL STEL (ppm)	100 ppm
Upozornenie (SK)	S - znamená, že faktor môže spôsobiť senzibilizáciu
Regulatory reference	Nariadenie vlády č. 33/2018 Z.z.
Slovakia - Biological limit values	
Local name	Xylén (všetky izoméry)
Slovenia - Occupational Exposure Limits	
Local name	difenilmetan-4,4-diizocianat (4,4'-metilendifenil diizocianat)
OEL TWA (mg/m ³)	0.05 mg/m ³ 0.005 mg/m ³
OEL TWA (ppm)	50 ppm
OEL STEL (mg/m ³)	0.05 mg/m ³
OEL STEL (ppm)	0.005 ppm
Remark (SI)	K (Lastnost lažjega prehajanja snovi v organizem skozi kožo), Y (Snovi, pri katerih ni nevarnosti za zarodek ob upoštevanju mejnih vrednosti in BAT vrednosti)
Regulatory reference	Uradni list RS, št. 78/2018 z dne 4.12.2018
Slovenia - Biological limit values	
Local name	ksilen (vse izomere)
Regulatory reference	Uradni list RS, št. 78/2018 z dne 4.12.2018
Spain - Occupational Exposure Limits	
Local name	Diisocianato de 4,4'-difenilmetano (MDI)
VLA-ED (mg/m ³)	0.052 mg/m ³
VLA-ED (ppm)	0.005 ppm
VLA-EC (mg/m ³)	442 mg/m ³
VLA-EC (ppm)	100 ppm
Spain - Biological limit values	
Local name	Xilenos, mezcla isómeros

Spain - BLV	1 g/g creatinine Parámetro: Ácidos metilhipúricos - Medio: Orina - Momento de muestreo: Final de la jornada laboral
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2019. INSHT
Sweden - Occupational Exposure Limits	
Local name	4,4'-Metylendifenylidiisocyanat (MDI)
nivågränsvärde (NVG) (mg/m ³)	0.03 mg/m ³
nivågränsvärde (NVG) (ppm)	0.002 ppm
kortidsvärde (KTV) (mg/m ³)	0.05 mg/m ³
kortidsvärde (KTV) (ppm)	0.005 ppm
United Kingdom - Occupational Exposure Limits	
Local name	Xylene
WEL TWA (mg/m ³)	220 mg/m ³ o-,m-,p- or mixed isomers
WEL TWA (ppm)	50 ppm o-,m-,p- or mixed isomers
WEL STEL (mg/m ³)	441 mg/m ³ o-,m-,p- or mixed isomers
WEL STEL (ppm)	100 ppm o-,m-,p- or mixed isomers
Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Third edition, 2018). HSE
United Kingdom - Biological limit values	
Local name	Xylene, o-, m-, p- or mixed isomers
United Kingdom (BEI)	650 mmol/mol Creatinine Parameter: methyl hippuric acid - Medium: urine - Samplingtime: Post shift
Regulatory reference	EH40/2005 (Third edition, 2018). HSE
Iceland - Occupational Exposure Limits	
Local name	Metylenbis(fenýlísósýanat) (difenýlmetan-4,4'-díísósýanat, MDI)
OEL (8 hours ref) (mg/m ³)	0.05 mg/m ³
OEL (8 hours ref) (ppm)	0.005 ppm
OEL (15 min ref) (mg/m ³)	0.1 mg/m ³ Þakgildið er miðað við fimm mínútna tímabil
OEL (15 min ref) (ppm)	0.01 ppm Þakgildið er miðað við fimm mínútna tímabil
Notes (IS)	O (efnið er ofnæmisvaldandi)
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr.390/2009)
Norway - Occupational Exposure Limits	
Local name	Difenýlmetan-4,4'-diisocyanat (MDI; Metylen-bis-fenyldiisocyanat)
Grenseverdier (AN) (mg/m ³)	0.05 mg/m ³
Grenseverdier (AN) (ppm)	0.005 ppm
Grenseverdier (Korttidsverdi) (ppm)	0.01 ppm

Merknader (NO)	A (Kjemikalier som skal betraktes som at de fremkaller allergi eller annen overfølsomhet i øynene eller luftveier, eller som skal betraktes som at de fremkaller allergi ved hudkontakt)
Regulatory reference	FOR-2018-08-21-1255
Switzerland - Occupational Exposure Limits	
Local name	Xylène (tous les isomères) / Xylol (alle Isomere)
MAK (mg/m ³)	435 mg/m ³
MAK (ppm)	100 ppm
KZGW (mg/m ³)	870 mg/m ³
KZGW (ppm)	200 ppm
Critical toxicity	VRS, SNC, Yeux, Vertige / OAW, ZNS, Auge, Schwindel
Notation	R, B / H, B
Remark	INRS, NIOSH
Regulatory reference	www.suva.ch, 01.07.2019
Turkey - Occupational Exposure Limits	
Local name	Ksilen
OEL TWA (mg/m ³)	221 mg/m ³ (karışım izomerleri, saf)
OEL TWA (ppm)	50 ppm (karışım izomerleri, saf)
OEL STEL (mg/m ³)	442 mg/m ³ (karışım izomerleri, saf)
OEL STEL (ppm)	100 ppm (karışım izomerleri, saf)
Comments	Deri
Regulatory reference	12 Ağustos 2013 Tarihli ve 28733 Sayılı Resmî Gazete
USA - ACGIH - Occupational Exposure Limits	
Local name	Methylene bisphenyl isocyanate (MDI)
ACGIH TWA (ppm)	0.005 ppm
ACGIH STEL (ppm)	150 ppm
Remark (ACGIH)	TLV® Basis: Resp sens
Regulatory reference	ACGIH 2019
Titanium Dioxide (13463-67-7)	
Occupational Exposure Limits	
Local name	Titanium dioxide
WEL TWA (mg/m ³)	4 mg/m ³ respirable 10 mg/m ³ total inhalable
Regulatory reference	EH40/2005 (Third edition, 2018). HSE

Exposure controls

Appropriate engineering controls: Ensure good ventilation of the work station.

Hand protection: Chemically resistant protective gloves. EN 374.

Eye protection: Chemical goggles or safety glasses. EN 166.

- **Skin and body protection:** Wear suitable protective clothing
- Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment .EN 14387
- Environmental exposure controls:** Avoid release to the environment

9 – PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state:	<i>Solid</i>
Appearance:	<i>Paste</i>
Colour:	<i>Various</i>
Odour:	<i>Characteristic</i>
Odour threshold:	<i>No data available</i>
pH:	<i>No data available</i>
Relative evaporation rate (butylacetate=1):	<i>No data available</i>
Melting point:	<i>Not applicable</i>
Freezing point:	<i>No data available</i>
Boiling point:	<i>No data available</i>
Flash point:	<i>Not applicable</i>
Auto-ignition temperature:	<i>No data available</i>
Decomposition temperature:	<i>No data available</i>
Flammability (solid, gas):	<i>Not applicable</i>
Vapour pressure:	<i>No data available</i>
Relative vapour density at 20 °C:	<i>No data available</i>
Relative density:	<i>No data available</i>
Density:	<i>1,08 ± 0,03 g/ml</i>
Solubility:	<i>No data available</i>
Log Pow:	<i>No data available</i>
Viscosity, kinematic:	<i>No data available</i>
Viscosity, dynamic:	<i>No data available</i>
Explosive properties:	<i>No data available</i>
Oxidising properties:	<i>No data available</i>
Explosive limits:	<i>No data available</i>
Other information	
VOC content:	<i>< 50 g/l</i>

10– STABILITY AND REACTIVITY

- Reactivity:** The product is non-reactive under normal conditions of use, storage and transport.
- Chemical stability:** Stable under normal conditions.

- Possibility of hazardous reactions:** No dangerous reactions known under normal conditions of use.

Conditions to avoid: None under recommended storage and handling conditions (see section 7).

Incompatible materials: No additional information available

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11- TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity (oral): Not classified

Titanium Dioxide (13463-67-7)	> 5000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up- and-Down Procedure), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity)
LD50 oral rat	

Skin corrosion/irritation: Not classified

Serious eye damage/irritation: Not classified

Respiratory or skin sensitisation: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT-single exposure: Not classified

STOT-repeated exposure: Not classified

Aspiration hazard: Not classified

12 – ECOLOGICAL INFORMATION

Toxicity

Ecology - general:

The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute): Not classified

Hazardous to the aquatic environment, long-term (chronic): Not classified

Titanium Dioxide (13463-67-7)	
LC50 fish 1	155 mg/l Test organisms (species): other:Japanese Medaka
EC50 Daphnia 1	19.3 mg/l Test organisms (species): Daphnia magna
EC50 Daphnia 2	27.8 mg/l Test organisms (species): Daphnia magna
EC50 72h algae (1)	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

NOEC (chronic)	≥ 2.92 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
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Persistence and degradability: No additional information available

Bioaccumulative potential: No additional information available

Mobility in soil: No additional information available

Results of PBT and vPvB assessment: No additional information available

Other adverse effects: No additional information available

13- DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.

14- TRANSPORT INFORMATION

In accordance with ADR / RID / IMDG / IATA / AND

ADR	IMDG	IATA	ADN	RID
UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

Special precautions for user

Overland transport: Not applicable

Transport by sea: Not applicable

Air transport: Not applicable

Inland waterway transport: Not applicable

Rail transport: Not applicable

Transport in bulk according to Annex II of Marpol and the IBC Code: Not applicable

15 – REGULATORY INFORMATION

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

EU-Regulations:

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:		
Reference code	Applicable on	Entry title or description
56.	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	Methylenediphenyl diisocyanate (MDI)
56(a)	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	Methylenediphenyl diisocyanate (MDI) isomers: 4,4'-Methylenediphenyl diisocyanate

Contains no substance on the REACH candidate list
 Contains no REACH Annex XIV substances
 Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content: < 50 g/l

National regulations

Germany

Reference to AwSV: Water hazard class (WGK) 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV:

Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

ABM category: B(4) - low hazard for aquatic organisms

SZW-lijst van kankerverwekkende stoffen: None of the components are listed

SZW-lijst van mutagene stoffen: None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding: None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid: None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling: xylene is listed

Denmark

Danish National Regulations:

Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with the product

Persons suffering from asthma or eczema and persons who have chronic lung diseases, skin or respiratory allergies to isocyanates should not work with the material

The requirements from the Danish Working Environment Authorities regarding work with epoxy resins and isocyanates must be observed during use and disposal

The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

Chemical safety assessment: No chemical safety assessment has been carried out

16-OTHER INFORMATION

Full text of H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour.
H312	Harmful in contact with skin.
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.
EUH204	Contains isocyanates. May produce an allergic reaction.
EUH212	Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.

The information contained in these sheets is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects and should not be construed as any guarantee of technical performance or suitability for particular applications.