Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Reference number: 610340

Issue date: 05/04/2002 Revision date: 14/06/2021 Supersedes version of: 22/02/2021 Version: 9.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Trade name : Mastic Colle Polyurethane

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

1.2.1. Relevant identified uses

Main use category : Professional use, Consumer use

Use of the substance/mixture : Sealants

Building and construction work

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Rubix Engineering 61, Avenue Tony Garnier 69007 Lyon, FRANCE T +33 (0)1.44.86.08.10

info-rubix-engineering@rubix.com

1.4. Emergency telephone number

: +32 14 58 45 45 (BIG) **Emergency number**

24h/24h

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Respiratory sensitisation, Category 1 H334

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS08

Signal word (CLP) : Danger

Contains : maleic anhydride, 4,4'-methylenediphenyl diisocyanate, fatty acids, C14-18 and C16-18-

unsaturated, maleated, reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate

and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. Hazard statements (CLP) Precautionary statements (CLP)

: P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children. P261 - Avoid breathing vapours, mist.

P284 - In case of inadequate ventilation wear respiratory protection.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

	P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER, a doctor. P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH-statements	 EUH212 - Warning! Hazardous respirable dust may be formed when used. Do not breathe dust. (Except for black/brown/transparent product).
Extra phrases	: Persons already sensitised to diisocyanates may develop allergic reactions when using this product.
	Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.
	This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used. As from 24 August 2023 adequate training is required before industrial or professional use.

2.3. Other hazards

The product does not meet the PBT and vPvB classification criteria

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component		
4,4'-methylenediphenyl diisocyanate (101-68-8)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
fatty acids, C14-18 and C16-18-unsaturated, maleated (85711-46-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

The mixture 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 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
reaction mass of ethylbenzene and xylene	EC-No.: 905-588-0 REACH-no: 01-2119488216- 32	≥ 5 – < 10	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304
4,4'-methylenediphenyl diisocyanate substance with national workplace exposure limit(s) (BE)	CAS-No.: 101-68-8 EC-No.: 202-966-0 EC Index-No.: 615-005-00-9 REACH-no: 01-2119457014- 47	≥ 0,1 – < 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

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
fatty acids, C14-18 and C16-18-unsaturated, maleated	CAS-No.: 85711-46-2 EC-No.: 288-306-2 REACH-no: 01-2119976378- 19	≥ 0,1 – < 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317
reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	CAS-No.: 1065336-91-5 EC-No.: 915-687-0 REACH-no: 01-2119491304- 40	< 0,1	Skin Sens. 1A, H317 Repr. 2, H361f Aquatic Acute 1, H400 Aquatic Chronic 1, H410
maleic anhydride substance with national workplace exposure limit(s) (BE)	CAS-No.: 108-31-6 EC-No.: 203-571-6 EC Index-No.: 607-096-00-9	< 0,1	Acute Tox. 4 (Oral), H302 STOT RE 1, H372 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1A, H317

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
4,4'-methylenediphenyl diisocyanate	CAS-No.: 101-68-8 EC-No.: 202-966-0 EC Index-No.: 615-005-00-9 REACH-no: 01-2119457014-	(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
maleic anhydride	CAS-No.: 108-31-6 EC-No.: 203-571-6 EC Index-No.: 607-096-00-9	(0,001 ≤C ≤ 100) Skin Sens. 1A, H317

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a

doctor if you feel unwell.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash

occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth out with water. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

Unsuitable extinguishing media : None known.

14/06/2021 (Revision date) EU - en 3/15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

Firefighting instructions : Dilute toxic gases with water spray.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. 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".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Scoop solid spill into closing containers. Clean contaminated surfaces with an excess of

water. Wash clothing and equipment after handling.

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

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. 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.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store tightly closed in a dry, cool and well-ventilated place.

Incompatible products : Heat sources.

Maximum storage period : 1 year

Packaging materials : aluminium.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

	maleic anhydride (108-31-6)	
Belgium - Occupational Exposure Limits		
	Local name	Anhydride maléique (vapeur et aerosol) # Maleïnezuuranhydride (damp en aërosol)

14/06/2021 (Revision date) EU - en 4/15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

maleic anhydride (108-31-6)		
OEL TWA	0,01 mg/m³	
OEL TWA [ppm]	0,0025 ppm	
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020	
4,4'-methylenediphenyl diisocyanate (101-68-8)		
Belgium - Occupational Exposure Limits		
Local name	4,4'-Diisocyanate de diphénylméthane (MDI) # Difenylmethaan-4,4'-di-isocyanaat (MDI)	
OEL TWA	0,052 mg/m³	
OEL TWA [ppm]	0,005 ppm	
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8 1 4 DNFL and PNFC

B.1.4. DNEL and PNEC		
4,4'-methylenediphenyl diisocyanate (101-68-8)		
DNEL/DMEL (Workers)		
Acute - local effects, inhalation	0,1 mg/m³	
Long-term - local effects, inhalation	0,05 mg/m³	
DNEL/DMEL (General population)		
Acute - local effects, inhalation	0,05 mg/m³	
Long-term - local effects, inhalation	0,025 mg/m³	
PNEC (Water)		
PNEC aqua (freshwater)	1 mg/l	
PNEC aqua (marine water)	0,1 mg/l	
PNEC (Soil)		
PNEC soil	1 mg/kg dwt	
PNEC (STP)		
PNEC sewage treatment plant	1 mg/l	
reaction mass of ethylbenzene and xylene		
DNEL/DMEL (Workers)		
Acute - systemic effects, inhalation	442 mg/m³	
Acute - local effects, inhalation	442 mg/m³	
Long-term - systemic effects, dermal	212 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	221 mg/m³	
Long-term - systemic effects, inhalation Long-term - local effects, inhalation	221 mg/m³ 221 mg/m³	
	-	
Long-term - local effects, inhalation	-	
Long-term - local effects, inhalation DNEL/DMEL (General population)	221 mg/m³	

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

reaction mass of ethylbenzene and xylene	
Long-term - systemic effects, inhalation	65,3 mg/m³
Long-term - systemic effects, dermal	125 mg/kg bodyweight/day
Long-term - local effects, inhalation	65,3 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0,327 mg/l
PNEC aqua (marine water)	0,327 mg/l
PNEC aqua (intermittent, freshwater)	0,327 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	12,46 mg/kg dwt
PNEC sediment (marine water)	12,46 mg/kg dwt
PNEC (Soil)	
PNEC soil	2,31 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	6,58 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

$\label{protective} \textbf{Personal protective equipment symbol(s):}$







8.2.2.1. Eye and face protection

Eye protection:

Safety glasses (EN 166)

8.2.2.2. Skin protection

Skin and body protection:

Protective clothing (EN 14605 or EN 13034)

Hand protection:

Protective gloves against chemicals (EN 374)

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid Colour Variable. **Appearance** Pasty. Odour solvent-like. Odour threshold Not available Melting point Not applicable Freezing point Not available Boiling point : Not available Flammability : Not applicable **Explosive limits** : Not applicable Lower explosion limit : Not applicable Upper explosion limit : Not applicable : > 60 °C Flash point Auto-ignition temperature : Not applicable Decomposition temperature : Not available рΗ : Not available pH solution : Not available Viscosity, kinematic : Not applicable Solubility : Not available Partition coefficient n-octanol/water (Log Kow) : Not available : Not available Vapour pressure Vapour pressure at 50 °C : Not available Density : 1285 kg/m³ (20°C) Relative density : 1,285 (20°C) Relative vapour density at 20 °C : Not applicable : Not available Particle size Particle size distribution : Not available : Not available Particle shape : Not available Particle aspect ratio : Not available Particle aggregation state Particle agglomeration state : Not available Particle specific surface area : Not available Particle dustiness Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content : 10,19 % (130.94 g/l)

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Keep away from naked flames/heat.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

			the second second second			/
11	1	Intormation	on hazard class	es as detined i	n Regulation	(EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Acute toxicity (inhalation) :	Not classified
maleic anhydride (108-31-6)	
LD50 dermal rabbit	2620 mg/kg bodyweight Animal: rabbit, Animal sex: female, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
4,4'-methylenediphenyl diisocyanate (101-68-	8)
LD50 oral rat	> 2000 mg/kg bodyweight (Rat, Male / female, Read-across, Oral, 14 day(s))
LD50 dermal rabbit	> 9400 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Read-across, Dermal, 14 day(s))
LC50 Inhalation - Rat	0,49 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Read-across, Inhalation (aerosol), 14 day(s))
reaction mass of ethylbenzene and xylene	
LD50 dermal rabbit	12126 mg/kg bodyweight Animal: rabbit, Animal sex: male, Remarks on results: other:
fatty acids, C14-18 and C16-18-unsaturated, maleated (85711-46-2)	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method

acty acids, 014-10 and 010-10-disactifaced, maleated (00711-40-2)		
	> 2000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Read-across, Oral, 14 day(s))	
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))	

reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (1065336-91-5)

LD50 oral rat	3230 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), 95% CL: 2615 - 4247
LD50 dermal rat	> 3170 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation : Not classified Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified. Reproductive toxicity : Not classified STOT-single exposure : Not classified

4,4'-methylenediphenyl diisocyanate (101-68-8)

STOT-single exposure May cause respiratory irritation.

reaction mass of ethylbenzene and xylene

STOT-single exposure May cause respiratory irritation.

STOT-repeated exposure : Not classified

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

maleic anhydride (108-31-6)		
NOAEL (oral, rat, 90 days)	≈ 10 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)	
NOAEC (inhalation, rat, vapour, 90 days)	≈ 0,0033 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)	
STOT-repeated exposure	Causes damage to organs (respiratory system) through prolonged or repeated exposure (inhalation).	
4,4'-methylenediphenyl diisocyanate (101-68-	8)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
reaction mass of ethylbenzene and xylene		
LOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
fatty acids, C14-18 and C16-18-unsaturated, r	naleated (85711-46-2)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)	
reaction mass of bis(1,2,2,6,6-pentamethyl-4-(1065336-91-5)	piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	
NOAEL (oral, rat, 90 days)	300 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents), Guideline: EU Method B.7 (Repeated Dose (28 Days) Toxicity (Oral))	
Aspiration hazard :	Not classified	

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. 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

Not rapidly degradable

maleic anhydride (108-31-6)		
LC50 - Fish [1] 75 mg/l Test organisms (species): Lepomis macrochirus		
LC50 - Fish [2]	75 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)	
EC50 - Crustacea [1]	330 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	> 150 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	

Safety Data Sheet

BCF - Fish [1]

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8-8)		
> 1000 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Read-across, Nominal concentration)		
129,7 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 24 h, Daphnia magna, Static system, Fresh water, Read-across, Locomotor effect)		
> 1640 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Read-across, GLP)		
> 3,4 mg/l Test organisms (species): Ceriodaphnia dubia		
3,16 mg/l Test organisms (species): Daphnia magna Duration: '21 d'		
> 1,3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'		
maleated (85711-46-2)		
> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value, GLP)		
> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)		
> 2,76 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)		
> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)		
1-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate		
0,9 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)		
1,68 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)		
0,42 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)		
Contains non readily biodegradable component(s).		
8-8)		
not readily degradable in water.		
Persistence and degradability not readily degradable in water. fatty acids, C14-18 and C16-18-unsaturated, maleated (85711-46-2)		
not readily degradable in water.		
Does not contain bioaccumulative component(s).		
8-8)		

92-200 (OECD 305: Bioconcentration: Flow-Through Fish Test, 4 week(s), Cyprinus

carpio, Flow-through system, Fresh water, Experimental value, GLP)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

4,4'-methylenediphenyl diisocyanate (101-68-8)		
Partition coefficient n-octanol/water (Log Pow) 4,51 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 22 °C)		
Bioaccumulative potential Low potential for bioaccumulation (BCF < 500).		
fatty acids, C14-18 and C16-18-unsaturated, maleated (85711-46-2)		
BCF - Other aquatic organisms [1] 10 (BCFBAF v3.01, Calculated value)		
Partition coefficient n-octanol/water (Log Pow) > 4 (Experimental value, Other, 23 °C)		
Bioaccumulative potential Bioaccumulation possible.		

12.4. Mobility in soil

4,4'-methylenediphenyl diisocyanate (101-68-8)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc) 4,53 – 5,455 (log Koc, SRC PCKOCWIN v2.0, Calculated value)		
Ecology - soil Product adsorbs onto the soil.		
fatty acids, C14-18 and C16-18-unsaturated, m	naleated (85711-46-2)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc) 2,41 – 5,38 (log Koc, Other, Calculated value)		

12.5. Results of PBT and vPvB assessment

Mastic Colle Polyurethane

The product does not meet the PBT and vPvB classification criteria

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

Sewage disposal recommendations

Additional information

Ecology - waste materials

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

: Do not discharge into drains or the environment.

: Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

: Avoid release to the environment.

European List of Waste (LoW) code

: 08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances

15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

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

ADR	IMDG IATA ADN		RID	
14.1. UN number or ID number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID
14.2. UN proper shippin	g name			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard o	class(es)			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental haz	ards			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(a)	reaction mass of ethylbenzene and xylene	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
3(b)	reaction mass of ethylbenzene and xylene; reaction mass of bis(1,2,2,6,6-pentamethyl- 4-piperidyl) sebacate and methyl 1,2,2,6,6- pentamethyl-4-piperidyl sebacate; fatty acids, C14-18 and C16-18- unsaturated, maleated	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(c)	reaction mass of bis(1,2,2,6,6-pentamethyl- 4-piperidyl) sebacate and methyl 1,2,2,6,6- pentamethyl-4-piperidyl sebacate	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1
40.	reaction mass of ethylbenzene and xylene	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.
56.	4,4'-methylenediphenyl diisocyanate	Methylenediphenyl diisocyanate (MDI)
56(a)	4,4'-methylenediphenyl diisocyanate	Methylenediphenyl diisocyanate (MDI) isomers: 4,4'-Methylenediphenyl diisocyanate
74.	4,4'-methylenediphenyl diisocyanate	Diisocyanates, O = C=N-R-N = C=O, with R an aliphatic or aromatic hydrocarbon unit of unspecified length

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

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

VOC content : 10,19 % (130.94 g/l)

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes	Indication of changes		
Section	Changed item	Change	Comments
	according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878		
2.2		Modified	
3.2		Modified	

Abbreviations and acronyms:	
ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR European Agreement concerning the International Carriage of Dangerous Goods by Road	

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:			
ATE	Acute Toxicity Estimate		
BLV	Biological limit value		
CAS-No.	Chemical Abstract Service number		
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008		
DMEL	Derived Minimal Effect level		
DNEL	Derived-No Effect Level		
EC50	Median effective concentration		
EC-No.	European Community number		
EN	European Standard		
IATA	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		
LC50	Median lethal concentration		
LD50	Median lethal dose		
LOAEL	Lowest Observed Adverse Effect Level		
NOAEC	No-Observed Adverse Effect Concentration		
NOAEL	No-Observed Adverse Effect Level		
NOEC	No-Observed Effect Concentration		
OEL	Occupational Exposure Limit		
PBT	Persistent Bioaccumulative Toxic		
PNEC	Predicted No-Effect Concentration		
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006		
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail		
SDS	Safety Data Sheet		
vPvB	Very Persistent and Very Bioaccumulative		
WGK	Water Hazard Class		

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		
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4		
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1		
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1		
Asp. Tox. 1	Aspiration hazard, Category 1		
Carc. 2	Carcinogenicity, Category 2		
EUH212	Warning! Hazardous respirable dust may be formed when used. Do not breathe dust. (Except for black/brown/transparent product)		
Eye Dam. 1	Serious eye damage/eye irritation, Category 1		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2		

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:				
Flam. Liq. 3	Flammable liquids, Category 3			
H226	Flammable liquid and vapour.			
H302	Harmful if swallowed.			
H304	May be fatal if swallowed and enters airways.			
H312	Harmful in contact with skin.			
H314	Causes severe skin burns and eye damage.			
H315	Causes skin irritation.			
H317	May cause an allergic skin reaction.			
H318	Causes serious eye damage.			
H319	Causes serious eye irritation.			
H332	Harmful if inhaled.			
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.			
H335	May cause respiratory irritation.			
H351	Suspected of causing cancer.			
H361f	Suspected of damaging fertility.			
H372	Causes damage to organs through prolonged or repeated exposure.			
H373	May cause damage to organs through prolonged or repeated exposure.			
H400	Very toxic to aquatic life.			
H410	Very toxic to aquatic life with long lasting effects.			
Repr. 2	Reproductive toxicity, Category 2			
Resp. Sens. 1	Respiratory sensitisation, Category 1			
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B			
Skin Irrit. 2	Skin corrosion/irritation, Category 2			
Skin Sens. 1	Skin sensitisation, Category 1			
Skin Sens. 1A	Skin sensitisation, category 1A			
Skin Sens. 1B	Skin sensitisation, category 1B			
STOT RE 1	Specific target organ toxicity – Repeated exposure, 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			

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:				
Resp. Sens. 1	H334	Calculation method		

Safety Data Sheet (SDS), EU-20212

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.