



ZINGATARFREE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 5/29/2015 Revision date: 6/8/2023 Supersedes version of: 10/10/2022 Version: 3.1

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

1.1. Product identifier

Product form : Mixture
Trade name : ZINGATARFREE
UFI : GP20-T0X9-S00M-AT1J
Product code : HLIB-TAR-MIOPU
Product group : Paint

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

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ZINGAMETALL B.V.
Rozenstraat, 4
B- 9810 Eke
Belgium
T +32 9 385 68 81
info@zinga.be - www.zinga.eu

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Australia	NSW Poisons Information Centre The Children's Hospital at Westmead	Locked Bag 4001 NSW 2145 Westmead	13 11 26	
Belgium	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Militaire Reine Astrid	Rue Bruyn 1 1120 Brussels	+32 70 245 245	Please dial: 070 245 245 for any urgent questions about intoxication (free of charge 24/7), if not accessible, dial: 02 264 96 30 (standard fee)
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flammable liquids, Category 3 H226
Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2 H319
Respiratory sensitisation, Category 1 H334

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Skin sensitisation, Category 1	H317
Carcinogenicity, Category 2	H351
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335
Specific target organ toxicity – Repeated exposure, Category 2	H373
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412
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)



Signal word (CLP)

: Danger

Contains

: Prepolymer based on aromatic polyisocyanate; DIPHENYLMETHANE-4,4'-DIISOCYANATE, ISOMERES AND HOMOLOGUES; XYLEEN; HYDROCARBONS, C9,AROMATICS; Arom. Polyisocyanat

Hazard statements (CLP)

: H226 - Flammable liquid and vapour.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
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.
H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP) : P210 - Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves. Contact your supplier to choose the most suitable protective gloves.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
EUH-statements : EUH204 - Contains isocyanates. May produce an allergic reaction.
Extra phrases : For professional users only.
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

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH 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 %

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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]
HYDROCARBONS, C9,AROMATICS (Note P)	CAS-No.: 128601-23-0 EC-No.: 918-668-5 EC Index-No.: 649-356-00-4 REACH-no: 01-2119455851-35	12.5 - 15	Flam. Liq. 3, H226 STOT SE 3, H336 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066
Arom. Polyisocyanat	CAS-No.: 67815-87-6	5 - 10	Acute Tox. 4 (Inhalation:gas), H332 (ATE=4500 ppmv/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373
DIPHENYLMETHANE-4,4'-DIISOCYANATE, ISOMERES AND HOMOLOGUES	CAS-No.: 9016-87-9 EC Index-No.: 615-005-01-6	5 - 10	Acute Tox. 4 (Inhalation:vapour), H332 (ATE=0.2 mg/l/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373
Prepolymer based on aromatic polyisocyanate	CAS-No.: 127821-00-5	2.5 - 5	Eye Irrit. 2, H319 Skin Sens. 1, H317
4,4'-METHYLENEDIPHENYL DIISOCYANATE (Note C)(Note 2)	CAS-No.: 101-68-8 EC-No.: 202-966-0 EC Index-No.: 615-005-00-9 REACH-no: 01-2119457014-47	2.5 - 5	Carc. 2, H351 Acute Tox. 4 (Inhalation), H332 (ATE=0.368 mg/l/4h) STOT RE 2, H373 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334 Skin Sens. 1, H317
XYLEEN substance with a Community workplace exposure limit (Note C)	CAS-No.: 1330-20-7 EC-No.: 215-535-7 EC Index-No.: 601-022-00-9 REACH-no: 01-2119488216-32	2.5 - 5	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Acute Tox. 4 (Inhalation), H332 (ATE=11 mg/l/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
DIPHENYLMETHANE-2,4'-DIISOCYANATE (Note C)(Note 2)	CAS-No.: 5873-54-1 EC-No.: 227-534-9 EC Index-No.: 615-005-00-9 REACH-no: 01-2119480143-45	1 - 2.5	Carc. 2, H351 Acute Tox. 4 (Inhalation), H332 (ATE=0.387 mg/l/4h) STOT RE 2, H373 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334 Skin Sens. 1, H317
2,2'-METHYLENEDIPHENYL DIISOCYANATE (Note C)(Note 2)	CAS-No.: 2536-05-2 EC-No.: 219-799-4 EC Index-No.: 615-005-00-9 REACH-no: 01-2119927323-43	< 1	Carc. 2, H351 Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) 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	CAS-No.: 101-68-8 EC-No.: 202-966-0 EC Index-No.: 615-005-00-9 REACH-no: 01-2119457014-47	(0.1 ≤C < 100) Resp. Sens. 1, H334 (5 ≤C < 100) Skin Irrit. 2, H315 (5 ≤C < 100) Eye Irrit. 2, H319 (5 ≤C < 100) STOT SE 3, H335

Note 2: Note 2 : The concentration of isocyanate stated is the percentage by weight of the free monomer calculated with reference to the total weight of the mixture.

Note C: Note C : Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Note P: Note P : The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0,1 % w/w benzene (Einecs No 200-753-7), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes. Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P260-P262-P301 + P310- P331 shall apply.

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	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Get medical advice/attention.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists. Consult an eye specialist.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Get medical advice/attention.

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

Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
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4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Carbon dioxide. Dry powder.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : This product is flammable.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : No open flames, no sparks, and no smoking. Avoid contact with skin, eyes and clothing.
Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection.
Emergency procedures : Ventilate area. Stop leak if safe to do so. Cover spill with non combustible material, e.g.: sand/earth.

6.2. Environmental precautions

Prevent liquid from entering sewers, watercourses, underground or low areas. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spills and put it into appropriated container. Absorb spilled material with sand or earth. This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

See Section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid all unnecessary exposure. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ensure good ventilation of the work station.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place. Keep in fireproof place. Protect from sunlight.
Incompatible materials : Heat sources. Direct sunlight.
Storage area : Store in a well-ventilated place. Store away from heat.

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7.3. Specific end use(s)

For the relevant identified uses in accordance with section 1, the notes mentioned in this section 7 must be observed.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

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/m ³
OEL TWA [ppm]	0.005 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 21/01/2020
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	0.02 mg/m ³
WEL STEL (OEL STEL)	0.07 mg/m ³
Remark	(as -NCO)
DIPHENYLMETHANE-4,4'-DIISOCYANATE, ISOMERES AND HOMOLOGUES (9016-87-9)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	0.02 mg/m ³
WEL STEL (OEL STEL)	0.07 mg/m ³
Remark	(as -NCO)
XYLEEN (1330-20-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	221 mg/m ³
IOEL TWA [ppm]	50 ppm
IOEL STEL	442 mg/m ³
IOEL STEL [ppm]	100 ppm
Remark	Skin
Belgium - Occupational Exposure Limits	
OEL TWA	221 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	442 mg/m ³
OEL STEL [ppm]	100 ppm
Remark	D
Ireland - Occupational Exposure Limits	
OEL TWA [1]	221 mg/m ³
OEL TWA [2]	50 ppm
OEL STEL	442 mg/m ³
OEL STEL [ppm]	100 ppm

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XYLEEN (1330-20-7)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	220 mg/m ³ (Sk)
WEL TWA (OEL TWA) [2]	50 ppm (Sk) 650 ppm (methyl hippuric acid/mol creatinine in urine, Post shift)
WEL STEL (OEL STEL)	441 mg/m ³ (Sk)
WEL STEL (OEL STEL) [ppm]	100 ppm (Sk)
TALC (FREE OF ASBESTOS) (14807-96-6)	
Belgium - Occupational Exposure Limits	
Local name	Talc (sans fibre d'amiante)
OEL TWA	2 mg/m ³
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	1 mg/m ³
QUARTZ (14808-60-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Silica crystalline (Quartz)
IOEL TWA	0.1 mg/m ³
IOEL STEL	0.1 mg/m ³
Remark	(Year of adoption 2003)
Regulatory reference	SCOEL Recommendations
IRON(III)OXIDE (1309-37-1)	
Belgium - Occupational Exposure Limits	
OEL TWA	2 mg/m ³

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

XYLEEN (1330-20-7)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	289 mg/m ³
Acute - local effects, inhalation	289 mg/m ³
Long-term - systemic effects, dermal	180 mg/kg bodyweight/day
Long-term - local effects, dermal	180 mg/m ³
Long-term - systemic effects, inhalation	77 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	174 mg/m ³
Acute - local effects, inhalation	174 mg/m ³
Long-term - systemic effects, oral	1.6 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	14.8 mg/m ³

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XYLEEN (1330-20-7)	
Long-term - systemic effects, dermal	108 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.327 mg/l
PNEC aqua (marine water)	0.327 mg/l
PNEC aqua (intermittent, freshwater)	0.327
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
HYDROCARBONS, C9,AROMATICS (128601-23-0)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	1300 mg/m ³
Acute - local effects, inhalation	1100 mg/m ³
Long-term - systemic effects, dermal	25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	150 mg/m ³
Long-term - local effects, inhalation	840 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	1200 mg/m ³
Acute - local effects, inhalation	640 mg/m ³
Long-term - systemic effects,oral	11 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	32 mg/m ³
Long-term - systemic effects, dermal	11 mg/kg bodyweight/day
Long-term - local effects, inhalation	180 mg/m ³

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

Personal protective equipment:

Wear eye protection. Wear protective gloves. Wear protective clothing. Wear respiratory protection.

Personal protective equipment symbol(s):



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8.2.2.1. Eye and face protection

Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses	Droplet	With side shields	EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Wear protective gloves. Contact your supplier to choose the most suitable protective gloves.

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	>0.1		EN ISO 374-1

8.2.2.3. Respiratory protection

Respiratory protection:

Wear appropriate mask

Respiratory protection			
Device	Filter type	Condition	Standard
Disposable half mask, Reusable half mask	ABEK, Type A - High-boiling (>65 °C) organic compounds	Vapour protection	EN 405, EN 14387

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Do not allow into drains or water courses. Notify authorities if product enters sewers or public waters.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Black.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 25 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available

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Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1.57 kg/l
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

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 : < 286 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

In use may form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

Stable under normal conditions of use.

10.4. Conditions to avoid

Open flame. Overheating. Direct sunlight.

10.5. Incompatible materials

None.

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

Prepolymer based on aromatic polyisocyanate (127821-00-5)

LD50 oral rat	> 5000 mg/kg
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4,4'-METHYLENEDIPHENYL DIISOCYANATE (101-68-8)

LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 9400 mg/kg
LC50 Inhalation - Rat	0.368 mg/l/4h

DIPHENYLMETHANE-2,4'-DIISOCYANATE (5873-54-1)

LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 9400 mg/kg
LC50 Inhalation - Rat	0.387 mg/l/4h

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DIPHENYLMETHANE-4,4'-DIISOCYANATE, ISOMERES AND HOMOLOGUES (9016-87-9)	
LD50 dermal rabbit	> 9400 mg/kg
LC50 Inhalation - Rat	0.31 mg/l/4h
2,2'-METHYLENEDIPHENYL DIISOCYANATE (2536-05-2)	
LD50 dermal rabbit	> 9400
XYLEEN (1330-20-7)	
LD50 oral rat	4300 mg/kg
LD50 dermal rat	1100 mg/kg
LC50 Inhalation - Rat	> 20 mg/l/4h
HYDROCARBONS, C9,AROMATICS (128601-23-0)	
LD50 oral rat	3492 mg/kg
LD50 dermal rabbit	3160 mg/kg
LC50 Inhalation - Rat	> 5 mg/l/4h
Arom. Polyisocyanaat (67815-87-6)	
LD50 oral rat	> 9400
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
4,4'-METHYLENEDIPHENYL DIISOCYANATE (101-68-8)	
LOAEC (inhalation, rat, vapour)	1 mg/l/4h
NOAEC (inhalation, rat, vapour)	0.2 mg/l/4h
STOT-single exposure	May cause respiratory irritation.
DIPHENYLMETHANE-2,4'-DIISOCYANATE (5873-54-1)	
LOAEC (inhalation, rat, vapour)	1 mg/l/4h
NOAEC (inhalation, rat, vapour)	0.2 mg/l/4h
STOT-single exposure	May cause respiratory irritation.
DIPHENYLMETHANE-4,4'-DIISOCYANATE, ISOMERES AND HOMOLOGUES (9016-87-9)	
NOAEC (inhalation, rat, vapour)	0.2 mg/l/4h
STOT-single exposure	May cause respiratory irritation.
2,2'-METHYLENEDIPHENYL DIISOCYANATE (2536-05-2)	
STOT-single exposure	May cause respiratory irritation.
XYLEEN (1330-20-7)	
STOT-single exposure	May cause respiratory irritation.
HYDROCARBONS, C9,AROMATICS (128601-23-0)	
STOT-single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.

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Arom. Polyisocyanaat (67815-87-6)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
4,4'-METHYLENEDIPHENYL DIISOCYANATE (101-68-8)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
DIPHENYLMETHANE-2,4'-DIISOCYANATE (5873-54-1)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
DIPHENYLMETHANE-4,4'-DIISOCYANATE, ISOMERES AND HOMOLOGUES (9016-87-9)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
2,2'-METHYLENEDIPHENYL DIISOCYANATE (2536-05-2)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
XYLEEN (1330-20-7)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Arom. Polyisocyanaat (67815-87-6)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
HYDROCARBONS, C9,AROMATICS (128601-23-0)	
Hydrocarbon	Yes
Aliphatic, alicyclic or aromatic hydrocarbon	Yes

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

4,4'-METHYLENEDIPHENYL DIISOCYANATE (101-68-8)	
LC50 - Fish [1]	> 1000 mg/l (96 Hours)
EC50 - Crustacea [1]	> 1000 mg/l (24 Hours)
EC50 - Other aquatic organisms [1]	> 100 mg/l (3 Hours)
ErC50 other aquatic plants	> 1640 mg/l (72 Hours)
NOEC (chronic)	> 10 mg/l (21 days)
DIPHENYLMETHANE-2,4'-DIISOCYANATE (5873-54-1)	
LC50 - Fish [1]	> 1000 mg/l (96 Hours)
EC50 - Crustacea [1]	> 1000 mg/l (24 Hours)
EC50 - Other aquatic organisms [1]	> 100 mg/l (3 Hours)
ErC50 other aquatic plants	> 1640 mg/l (72 Hours)

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DIPHENYLMETHANE-2,4'-DIISOCYANATE (5873-54-1)	
NOEC (chronic)	> 1000 mg/l (14 days)
NOEC chronic crustacea	> 10 mg/l (21 days)
DIPHENYLMETHANE-4,4'-DIISOCYANATE, ISOMERES AND HOMOLOGUES (9016-87-9)	
EC50 - Other aquatic organisms [1]	> 100 mg/l
NOEC chronic crustacea	> 10 mg/l (21 days)
XYLEEN (1330-20-7)	
LC50 - Fish [1]	2.6 mg/l (96 Hours)
EC50 - Crustacea [1]	1 mg/l (48 Hours)
EC50 - Other aquatic organisms [1]	4.36 mg/l (EC50 72h algae)
NOEC chronic fish	1.3 mg/l (56 days)
HYDROCARBONS, C9,AROMATICS (128601-23-0)	
LC50 - Fish [1]	9.22 mg/l (96 Hours)
EC50 - Crustacea [1]	3.2 mg/l (48 Hours)
EC50 - Other aquatic organisms [1]	2.9 mg/l (72 Hours)
ErC50 algae	1 – 10 mg/l (96 Hours)
12.2. Persistence and degradability	
ZINGATARFREE	
Persistence and degradability	Not established.
XYLEEN (1330-20-7)	
Persistence and degradability	Readily biodegradable.
Biodegradation	87.8 % (28 days)
HYDROCARBONS, C9,AROMATICS (128601-23-0)	
Biodegradation	78 % (28 days)
12.3. Bioaccumulative potential	
ZINGATARFREE	
Bioaccumulative potential	Not established.
DIPHENYLMETHANE-2,4'-DIISOCYANATE (5873-54-1)	
BCF - Fish [1]	200 mg/kg 28 days
DIPHENYLMETHANE-4,4'-DIISOCYANATE, ISOMERES AND HOMOLOGUES (9016-87-9)	
BCF - Fish [1]	< 14 mg/kg (42 days)
XYLEEN (1330-20-7)	
Bioconcentration factor (BCF REACH)	15.65
Partition coefficient n-octanol/water (Log Pow)	3.12

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12.4. Mobility in soil

XYLEEN (1330-20-7)

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.59 – 2.56
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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Dispose of contents/container to a special collecting point in accordance with local legislation.
Ecology - waste materials	: Avoid release to the environment.
European List of Waste (LoW) code	: 15 01 10* - packaging containing residues of or contaminated by dangerous substances 08 01 11* - waste paint and varnish containing organic solvents or other dangerous substances
HP Code	: HP3 - "Flammable:" – flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C; – flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air; – flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction; – flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa; – water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities; – other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste. HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration. HP7 - "Carcinogenic:" waste which induces cancer or increases its incidence HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye. HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 1263	UN 1263	UN 1263	UN 1263	Not applicable

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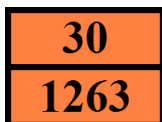
according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID
14.2. UN proper shipping name				
PAINT / PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	Paint related material	PAINT RELATED MATERIAL	Not applicable
Transport document description				
UN 1263 PAINT / PAINT RELATED MATERIAL, 3, III, (D/E)	UN 1263 PAINT RELATED MATERIAL, 3, III	UN 1263 Paint related material, 3, III	UN 1263 PAINT RELATED MATERIAL, III	Not applicable
14.3. Transport hazard class(es)				
3	3	3	Not applicable	Not applicable
			Not applicable	Not applicable
14.4. Packing group				
III	III	III	III	Not applicable
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: F1
Special provisions (ADR)	: 163, 640E, 650, 367
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T2
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBF
Vehicle for tank carriage	: FL
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Operation (ADR)	: S2
Hazard identification number (Kemler No.)	: 30
Orange plates	:



Tunnel restriction code (ADR)	: D/E
EAC code	: •3YE

Transport by sea

Special provisions (IMDG)	: 163, 223, 955
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
Special packing provisions (IMDG)	: PP1

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IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T2
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-E
Stowage category (IMDG)	: A

Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y344
PCA limited quantity max net quantity (IATA)	: 10L
PCA packing instructions (IATA)	: 355
PCA max net quantity (IATA)	: 60L
CAO packing instructions (IATA)	: 366
CAO max net quantity (IATA)	: 220L
Special provisions (IATA)	: A3, A72, A192
ERG code (IATA)	: 3L

Inland waterway transport

Special provisions (ADN)	: 163, 64E, 65
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Rail transport

Not applicable

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

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)

Reference code	Applicable on
74.	4,4'-METHYLENEDIPHENYL DIISOCYANATE ; DIPHENYLMETHANE-2,4'-DIISOCYANATE ; 2,2'-METHYLENEDIPHENYL DIISOCYANATE
3(a)	ZINGATARFREE ; XYLEEN ; HYDROCARBONS, C9,AROMATICS
3(b)	ZINGATARFREE ; Prepolymer based on aromatic polyisocyanate ; DIPHENYLMETHANE-4,4'-DIISOCYANATE, ISOMERES AND HOMOLOGUES ; XYLEEN ; HYDROCARBONS, C9,AROMATICS ; Arom. Polyisocyanat
3(c)	ZINGATARFREE ; HYDROCARBONS, C9,AROMATICS
40.	ZINGATARFREE ; XYLEEN ; HYDROCARBONS, C9,AROMATICS
56.	4,4'-METHYLENEDIPHENYL DIISOCYANATE ; DIPHENYLMETHANE-2,4'-DIISOCYANATE ; 2,2'-METHYLENEDIPHENYL DIISOCYANATE
56(a)	4,4'-METHYLENEDIPHENYL DIISOCYANATE
56(b)	DIPHENYLMETHANE-2,4'-DIISOCYANATE
56(c)	2,2'-METHYLENEDIPHENYL DIISOCYANATE

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

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PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

VOC Directive (2004/42)

VOC content : < 286 g/l

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 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

Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Other information	: None.

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:gas)	Acute toxicity (inhalation:gas) Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH204	Contains isocyanates. May produce an allergic reaction.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

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Full text of H- and EUH-statements:

H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
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

Safety Data Sheet (SDS), EU

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.