Safety data sheets Ferney Group BV

Date : 16-07-2024
VVFK(E) : 99/1516410
Rev : H

Opgesteld door: NB	Bekrachtigd door: SL

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

1.1. Product identifier

Productname	**Kelfort ® Constructie TIX**
Article number	1516410
Producttype	Mixture
Regulation	(EC) No. 1907/2006 and (EC) No. 1272/2008

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

Recommended use	Professional use, Consumer use
Uses advised against	None known.

1.3 Details of the supplier of the safety data sheet

Distributeur Ferney Group BV
Postbus 24
1700 AA Heerhugowaard – The Netherlands
T +31 (0)72-5765000 - F +31 (0)72-5765010
bedrijfsbureau@ferneygroup.nl - www.ferney.nl

1.4 Emergency telephone number

Noodtelefoon : +49(0)9366-907126 (ma-do 7.15-18.00 hour) or
: +31(0)88-7558000 (after worktime, exclusive use for doctors, pharmacists and government institutions)

Country	Organisation/ Company	Address	Emergency number	Comments
The Netherlands	National Poisons Information Center	House post number B.00.118 PO Box 85500 3508 GA Utrecht	+31 88 755 80 00	For the sole purpose of informing healthcare professionals in the event of acute poisoning

Opgesteld door: NB	Bekrachtigd door: SL

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity (inhalation:dust,mist) Category 4	H332
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Respiratory sensitisation, Category 1	H334
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 2	H411

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

Adverse physicochemical, human health and environmental effects

Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. Harmful if inhaled. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Toxic to aquatic life with long lasting effects.

Opgesteld door: NB	Bekrachtigd door: SL

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS07 GHS08 GHS09

Signal word (CLP) : Danger

Contains : aromatic polyisocyanate prepolymer; diphenylmethane-2,4'-diisocyanate; 4,4'-methylenediphenyl diisocyanate

Hazard statements (CLP) : 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.
H411 - Toxic to aquatic life with long lasting effects.

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 spray, mist.
P280 - Wear protective gloves, protective clothing, eye protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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.

Opgesteld door: NB	Bekrachtigd door: SL

2.3. Other hazards

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

Component	
diphenylmethane-2,4'-diisocyanate (5873-54-1)	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
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
diethylmethylbenzenediamine (68479-98-1)	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 substance(s) are 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

Opgesteld door: NB	Bekrachtigd door: SL

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
aromatic polyisocyanate prepolymer	CAS-No.: 99784-49-3	≥ 50 – < 75	Acute Tox. 4 (Inhalation:dust,mist), H332 (ATE=1.5 mg/l/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335 STOT RE 2, H373
diphenylmethane-2,4'-diisocyanate substance with national workplace exposure limit(s) (GB)	CAS-No.: 5873-54-1 EC-No.: 227-534-9 EC Index-No.: 615-005-00-9 REACH-no: 01-2119480143-45	≥ 10 – < 25	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
4,4'-methylenediphenyl diisocyanate substance with national workplace exposure limit(s) (GB)	CAS-No.: 101-68-8 EC-No.: 202-966-0 EC Index-No.: 615-005-00-9 REACH-no: 01-2119457014-47	≥ 10 – < 25	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
diethylmethylbenzenediamine	CAS-No.: 68479-98-1 EC-No.: 270-877-4 EC Index-No.: 612-130-00-0 REACH-no: 01-2119486805-25	≥ 0.1 – < 1	Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Acute Tox. 4 (Oral), H302 (ATE=738 mg/kg bodyweight) STOT RE 2, H373 Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Opgesteld door: NB	Bekrachtigd door: SL

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits (%)**
diphenylmethane-2,4'-diisocyanate	CAS-No.: 5873-54-1 EC-No.: 227-534-9 EC Index-No.: 615-005-00-9 REACH-no: 01-2119480143-45	(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
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) Eye Irrit. 2, H319 (5 ≤ C ≤ 100) Skin Irrit. 2, H315 (5 ≤ C ≤ 100) STOT SE 3, H335

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 (show the label where possible).

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 : If swallowed, seek medical advice immediately and show this container or label.

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

Symptoms/effects : May cause damage to organs through prolonged or repeated exposure.

Symptoms/effects after inhalation : May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

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

Treat symptomatically.

Opgesteld door: NB	Bekrachtigd door: SL

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Hazardous decomposition products in case of fire : Decomposes on exposure to temperature rise: release of (highly) toxic gases/vapours. Carbon monoxide. Carbon dioxide. formation of small quantities of hydrogen cyanide. Nitrous fumes.

5.3. Advice for firefighters

Firefighting instructions : Cool closed containers exposed to fire 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. Evacuate unnecessary personnel.

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

For containment : Collect spillage.
Methods for cleaning up : Collect spillage. On land, sweep or shovel into suitable containers. Clean contaminated surfaces with an excess of water.
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.

Opgesteld door: NB	Bekrachtigd door: SL

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Do not breathe vapours.

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

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

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

diphenylmethane-2,4'-diisocyanate (5873-54-1)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	0.02 mg/m³
WEL STEL (OEL STEL)	0.07 mg/m³

4,4'-methylenediphenyl diisocyanate (101-68-8)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	0.02 mg/m³
WEL STEL (OEL STEL)	0.07 mg/m³

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

No additional information available

8.1.5. Control banding

No additional information available

Opgesteld door: NB	Bekrachtigd door: SL

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:
Avoid all unnecessary exposure.

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Chemical goggles or 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 inadequate ventilation] wear respiratory protection. Gas mask with filter type A. According to EN529

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

Opgesteld door: NB	Bekrachtigd door: SL

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Transparent.
Appearance	:	Pasty.
Odour	:	characteristic.
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	Not available
Boiling point	:	Decomposes before boiling
Flammability	:	Not applicable
Explosive properties	:	The product is not flammable.
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	The product is not flammable
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	pH not determined (not soluble in water)
Viscosity, kinematic	:	Not available
Viscosity, dynamic	:	Thixotropic behaviour
Solubility	:	Insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	41 hPa Data apply to the main component
Density	:	≈ 1.1 g/cm³ (ISO 1183-1, 23°C)
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	:	< 0.3 %

Opgesteld door: NB	Bekrachtigd door: SL

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

None under recommended storage and handling conditions (see section 7).

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

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) : Inhalation:dust,mist: Harmful if inhaled.

Kelfort Constructie TIX	
ATE CLP (dust,mist)	1.575 mg/l/4h

aromatic polyisocyanate prepolymer (99784-49-3)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 9400 mg/kg
LC50 Inhalation - Rat	1.5 mg/l

diphenylmethane-2,4'-diisocyanate (5873-54-1)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: other:84/449/EEC (Gazette of the European Community, No. L 251, of 19 Sept, 1984, page 96)

Opgesteld door: NB	Bekrachtigd door: SL

diphenylmethane-2,4'-diisocyanate (5873-54-1)	
LD50 dermal rabbit	> 9400 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	387 mg/m³ air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male, Experimental value, Inhalation (aerosol))
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 (Dust/Mist)	0.49 mg/l/4h
diethylmethylbenzenediamine (68479-98-1)	
LD50 oral rat	738 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, 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))
LC50 Inhalation - Rat	> 2.45 mg/l (1 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))

Skin corrosion/irritation : Causes skin irritation.
pH: pH not determined (not soluble in water)

diphenylmethane-2,4'-diisocyanate (5873-54-1)	
pH	7 (Calculated, 7.5E-3 g/l, 25 °C)
4,4'-methylenediphenyl diisocyanate (101-68-8)	
pH	7 (6.8E-3 g/l, 25 °C)
diethylmethylbenzenediamine (68479-98-1)	
pH	8 (0.1 %)

Serious eye damage/irritation : Causes serious eye irritation.
pH: pH not determined (not soluble in water)

Opgesteld door: NB	Bekrachtigd door: SL

diphenylmethane-2,4'-diisocyanate (5873-54-1)	
pH	7 (Calculated, 7.5E-3 g/l, 25 °C)

4,4'-methylenediphenyl diisocyanate (101-68-8)	
pH	7 (6.8E-3 g/l, 25 °C)

diethylmethylbenzenediamine (68479-98-1)	
pH	8 (0.1 %)

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.

4,4'-methylenediphenyl diisocyanate (101-68-8)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

aromatic polyisocyanate prepolymer (99784-49-3)	
STOT-single exposure	May cause respiratory irritation.

Opgesteld door: NB	Bekrachtigd door: SL

diphenylmethane-2,4'-diisocyanate (5873-54-1)	
STOT-single exposure	May cause respiratory irritation.

4,4'-methylenediphenyl diisocyanate (101-68-8)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

aromatic polyisocyanate prepolymer (99784-49-3)	
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.

4,4'-methylenediphenyl diisocyanate (101-68-8)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

diethylmethylbenzenediamine (68479-98-1)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

diphenylmethane-2,4'-diisocyanate (5873-54-1)	
Viscosity, kinematic	No data available in the literature

4,4'-methylenediphenyl diisocyanate (101-68-8)	
Viscosity, kinematic	Not applicable (solid)

diethylmethylbenzenediamine (68479-98-1)	
Viscosity, kinematic	No data available in the literature

11.2. Information on other hazards

No additional information available

Opgesteld door: NB	Bekrachtigd door: SL

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Based on data available for ingredients
Not rapidly degradable

diphenylmethane-2,4'-diisocyanate (5873-54-1)	
LC50 - Fish [1]	> 1000 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	> 1000 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 24 h, Daphnia magna, Static system, Fresh water, Read-across, Locomotor effect)
ErC50 algae	> 1640 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Read-across, GLP)
NOEC (chronic)	≥ 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
diethylmethylbenzenediamine (68479-98-1)	
LC50 - Fish [1]	200 mg/l (DIN 38412-15, 48 h, Leuciscus idus, Static system, Fresh water, Experimental value, Nominal concentration)

Opgesteld door: NB	Bekrachtigd door: SL

diethylmethylbenzenediamine (68479-98-1)	
EC50 - Crustacea [1]	0.5 mg/l Test organisms (species): Daphnia magna
ErC50 algae	104 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)

12.2. Persistence and degradability

diphenylmethane-2,4'-diisocyanate (5873-54-1)	
Persistence and degradability	Not readily biodegradable in water.

4,4'-methylenediphenyl diisocyanate (101-68-8)	
Persistence and degradability	Not readily biodegradable in water.

diethylmethylbenzenediamine (68479-98-1)	
Persistence and degradability	Not biodegradable.
Chemical oxygen demand (COD)	2.37 g O_2/g substance

12.3. Bioaccumulative potential

diphenylmethane-2,4'-diisocyanate (5873-54-1)	
BCF - Fish [1]	92 – 200 (OECD 305: Bioconcentration: Flow-Through Fish Test, 28 day(s), Cyprinus carpio, Flow-through system, Fresh water, Read-across, GLP)
Partition coefficient n-octanol/water (Log Pow)	4.5 (Read-across, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 22 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

4,4'-methylenediphenyl diisocyanate (101-68-8)	
BCF - Fish [1]	92 – 200 (OECD 305: Bioconcentration: Flow-Through Fish Test, 28 day(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value, GLP)
Partition coefficient n-octanol/water (Log Pow)	4.5 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 22 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

diethylmethylbenzenediamine (68479-98-1)	
Partition coefficient n-octanol/water (Log Pow)	1.4 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

Opgesteld door: NB	Bekrachtigd door: SL

12.4. Mobility in soil

diphenylmethane-2,4'-diisocyanate (5873-54-1)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.5 – 5.5 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Adsorbs into the soil.

4,4'-methylenediphenyl diisocyanate (101-68-8)	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.5 – 5.5 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Adsorbs into the soil.

diethylmethylbenzenediamine (68479-98-1)	
Surface tension	50 mN/m (0.5 %)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.12 – 2.23 (log Koc, SRC PCKOCWIN v1.66, QSAR)
Ecology - soil	Low potential for adsorption in soil.

12.5. Results of PBT and vPvB assessment

Component	
diphenylmethane-2,4'-diisocyanate (5873-54-1)	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
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
diethylmethylbenzenediamine (68479-98-1)	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

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

Regional waste regulation : Collect all waste in suitable and labelled containers and dispose according to local legislation.

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

Sewage disposal recommendations : Do not discharge into drains or the environment.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Opgesteld door: NB	Bekrachtigd door: SL

SECTION 14: Transport information

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

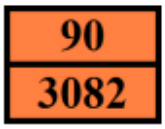
ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shipping name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (aromatic polyisocyanate prepolymer)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (aromatic polyisocyanate prepolymer)	Environmentally hazardous substance, liquid, n.o.s. (aromatic polyisocyanate prepolymer)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (aromatic polyisocyanate prepolymer)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (aromatic polyisocyanate prepolymer)

ADR	IMDG	IATA	ADN	RID
Transport document description				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (aromatic polyisocyanate prepolymer), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (aromatic polyisocyanate prepolymer), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (aromatic polyisocyanate prepolymer), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (aromatic polyisocyanate prepolymer), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (aromatic polyisocyanate prepolymer), 9, III
14.3. Transport hazard class(es)				
9	9	9	9	9
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available				

Opgesteld door: NB	Bekrachtigd door: SL

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: M6
Special provisions (ADR)	: 274, 335, 375, 601
Limited quantities (ADR)	: 5l
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)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90
Orange plates	: 
Tunnel restriction code (ADR)	: -
EAC code	: •3Z

Transport by sea

Special provisions (IMDG)	: 274, 335, 969
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1

Opgesteld door: NB	Bekrachtigd door: SL

Packing instructions (IMDG)	: LP01, P001
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A

Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
Special provisions (IATA)	: A97, A158, A197, A215
ERG code (IATA)	: 9L

Inland waterway transport

Classification code (ADN)	: M6
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0

Rail transport

Classification code (RID)	: M6
Special provisions (RID)	: 274, 335, 375, 601
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Special packing provisions (RID)	: PP1
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions (RID)	: TP1, TP29
Tank codes for RID tanks (RID)	: LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW31
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 90

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

Opgesteld door: NB	Bekrachtigd door: SL

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	Entry title or description
3(b)	Kelfort Constructie TIX ; aromatic polyisocyanate prepolymer ; diethylmethylbenzenediamine	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
3(c)	Kelfort Constructie TIX ; diethylmethylbenzenediamine	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
56.	diphenylmethane-2,4'-diisocyanate ; 4,4'-methylenediphenyl diisocyanate	Methylenediphenyl diisocyanate (MDI)
56(a)	4,4'-methylenediphenyl diisocyanate	Methylenediphenyl diisocyanate (MDI) isomers: 4,4'-Methylenediphenyl diisocyanate
56(b)	diphenylmethane-2,4'-diisocyanate	Methylenediphenyl diisocyanate (MDI) isomers: 2,4'-Methylenediphenyl diisocyanate
74.	diphenylmethane-2,4'-diisocyanate ; 4,4'-methylenediphenyl diisocyanate	Diisocyanates, O = C=N-R-N = C=O, with R an aliphatic or aromatic hydrocarbon unit of unspecified length

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

Opgesteld door: NB	Bekrachtigd door: SL

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 : < 0.3 %

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

Opgesteld door: NB	Bekrachtigd door: SL

SECTION 16: Other information

Indication of changes:
Physical and chemical properties.

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
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
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
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number

Opgesteld door: NB	Bekrachtigd door: SL

Abbreviations and acronyms:	
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

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
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H302	Harmful if swallowed.
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.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic 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

Opgesteld door: NB	Bekrachtigd door: SL

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Acute Tox. 4 (Inhalation:dust,mist)	H332	Calculation method
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Resp. Sens. 1	H334	Calculation method

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Skin Sens. 1	H317	Calculation method
Carc. 2	H351	Calculation method
STOT SE 3	H335	Calculation method
STOT RE 2	H373	Calculation method
Aquatic Chronic 2	H411	Expert judgement