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

1.1 Product identifier

WOMI W246 2K Plastic repair Flex 25 ml in blister (Part A)

Article number: 5570246
UFI: 9110-N0PA-5002-MD70

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

1.2.1 Relevant uses

Adhesive

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

Service Best B.V.
De Schakel 60
5651 GH Eindhoven/ the Netherlands
Phone +31 (0)40 230 2345
Fax
Homepage
E-mail info@servicebest.com

Address enquiries to

Technical information info@servicebest.com

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Advisory body +31 (0) 30 2748888

Company

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

Carc. 2: H351 Suspected of causing cancer.
Acute Tox. 4: H332 Harmful if inhaled.
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure.
Eye Irrit. 2: H319 Causes serious eye irritation.
Skin Irrit. 2: H315 Causes skin irritation.
STOT SE 3: H335 May cause respiratory irritation.
Resp. Sens. 1: H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1: H317 May cause an allergic skin reaction.

2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.

Hazard pictograms





Signal word DANGER

Contains: MDI-based polyisocyanate prepolymer

Diphenylmethanediisocyanate, isomeres and homologues

4,4'-Methylenediphenyl diisocyanate

o-(p-isocyanatobenzyl)phenyl isocyanate

2,2'-methylenediphenyl diisocyanate

Hazard statements

H351 Suspected of causing cancer.
H332 Harmful if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure.
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H335 May cause respiratory irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P260 Do not breathe vapours.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves / eye protection / face protection.
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.
P308+P311 IF exposed or concerned: Call a POISON CENTER / doctor /…
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/national regulation.

Special labelling

EUH204 Contains isocyanates. May produce an allergic reaction.
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

Human health dangers

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.
Contains no ingredients with endocrine-disrupting properties.

Environmental hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Contains no ingredients with endocrine-disrupting properties.

Other hazards

Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
25 - 50	MDI-based polyisocyanate prepolymer
	GHS/CLP: Carc. 2: H351 - Acute Tox. 4: H332 - STOT RE 2: H373 - Eye Irrit. 2: H319 - STOT SE 3: H335 - Skin Irrit. 2: H315 - Resp. Sens. 1: H334 - Skin Sens. 1: H317 - EUH204
25 - 70	Diphenylmethanediisocyanate, isomeres and homologues
	CAS: 9016-87-9, EINECS/ELINCS: 618-498-9
	GHS/CLP: Skin Irrit. 2: H315 - Skin Sens. 1: H317 - Eye Irrit. 2: H319 - Acute Tox. 4: H332 - Resp. Sens. 1: H334 - STOT SE 3: H335 - Carc. 2: H351 - STOT RE 2: H373 - EUH204
	SCL [%]: >= 5: STOT SE 3: H335, >= 5: Eye Irrit. 2: H319, >= 5: Skin Irrit. 2: H315, >= 0.1: Resp. Sens. 1: H334
10 - 20	4,4'-Methylenediphenyl diisocyanate
	CAS: 101-68-8, EINECS/ELINCS: 202-966-0, EU-INDEX: 615-005-00-9, Reg-No.: 01-2119457014-47-XXXX
	GHS/CLP: Skin Irrit. 2: H315 - Skin Sens. 1: H317 - Eye Irrit. 2: H319 - Acute Tox. 4: H332 - Resp. Sens. 1: H334 - STOT SE 3: H335 - Carc. 2: H351 - STOT RE 2: H373 - EUH204
	SCL [%]: >= 5: STOT SE 3: H335, >= 5: Eye Irrit. 2: H319, >= 5: Skin Irrit. 2: H315, >= 0.1: Resp. Sens. 1: H334
5 - 10	o-(p-isocyanatobenzyl)phenyl isocyanate
	CAS: 5873-54-1, EINECS/ELINCS: 227-534-9, EU-INDEX: 615-005-00-9, Reg-No.: 01-2119480143-45-XXXX
	GHS/CLP: Carc. 2: H351 - Acute Tox. 4: H332 - STOT RE 2: H373 - Eye Irrit. 2: H319 - STOT SE 3: H335 - Skin Irrit. 2: H315 - Resp. Sens. 1: H334 - Skin Sens. 1: H317 - EUH204
	SCL [%]: >= 5: STOT SE 3: H335, >= 5: Skin Irrit. 2: H315, >= 0.1: Resp. Sens. 1: H334, >= 5: Eye Irrit. 2: H319
< 3	[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane
	CAS: 2530-83-8, EINECS/ELINCS: 219-784-2, Reg-No.: 01-2119513212-58-XXXX
	GHS/CLP: Eye Dam. 1: H318
< 1	2,2'-methylenediphenyl diisocyanate
	CAS: 2536-05-2, EINECS/ELINCS: 219-799-4, EU-INDEX: 615-005-00-9, Reg-No.: 01-2119927323-43-XXXX
	GHS/CLP: Acute Tox. 4: H332 - 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 - EUH204
	SCL [%]: >= 5: STOT SE 3: H335, >= 5: Skin Irrit. 2: H315, >= 0.1: Resp. Sens. 1: H334, >= 5: Eye Irrit. 2: H319

Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Remove contaminated soaked clothing immediately and dispose of safely.
Remove affected person from danger area, lay down.
Place and transport casualty in recovery position.

Inhalation Remove the victim into fresh air and keep him calm.
In the event of symptoms seek medical treatment.
In case of respiratory arrest induce breathing with a respiratory device. Seek medical advice.

Skin contact In case of contact with skin wash off immediately with soap and water.
If skin irritation or rash occurs: Get medical advice/attention.

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.

Ingestion Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.
Consult a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
Forward this sheet to your doctor.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide.
Dry powder.
Alcohol-resistant foam.

Extinguishing media that must not be used

Full water jet

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.
Nitrogen oxides (NOx).
Hydrogen cyanide (HCN).

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Wear full protective suit.

Collect contaminated firefighting water separately, must not be discharged into the drains.
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.
Wear suitable protective equipment. For personal protection see SECTION 8.
High risk of slipping due to leakage/spillage of product.
Keep people away and stay on the upwind side.

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, sawdust, universal absorbent, diatomaceous earth).
Dispose of absorbed material in accordance within the regulations.
Ensure adequate ventilation.

6.4 Reference to other sections

See SECTION 7+8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.
Avoid contact with eyes and skin. Use personal protective equipment.
Open and handle container with care.
Always close container tightly after removal of product.
Special instructions for safe handling must be obtained before use.

Wash hands before breaks and after work.
Do not eat, drink or smoke when using this product.
Keep away from food and drink.
Contaminated work clothing should not be allowed out of the workplace.
Take off contaminated clothing and wash before reuse.
Use barrier skin cream.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Prevent penetration into the ground.

Keep away from water.
Do not store together with oxidizing agents.
Do not store together with food and animal food/diet.

Keep container tightly closed.
Keep container in a well-ventilated place.
Protect from atmospheric moisture and water.
Store in a dry place.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Substance
o-(p-isocyanatobenzyl)phenyl isocyanate
CAS: 5873-54-1, EINECS/ELINCS: 227-534-9, EU-INDEX: 615-005-00-9, Reg-No.: 01-2119480143-45-XXXX
Long-term exposure: 0,02 mg/m³, as NCO, Sen
Short-term exposure (15-minute): 0,07 mg/m³
Diphenylmethanediisocyanate, isomeres and homologues
CAS: 9016-87-9, EINECS/ELINCS: 618-498-9
Long-term exposure: 0,02 mg/m³, as NCO, Sen
Short-term exposure (15-minute): 0,07 mg/m³
4,4'-Methylenediphenyl diisocyanate
CAS: 101-68-8, EINECS/ELINCS: 202-966-0, EU-INDEX: 615-005-00-9, Reg-No.: 01-2119457014-47-XXXX
Long-term exposure: 0,02 mg/m³, as NCO, Sen
Short-term exposure (15-minute): 0,07 mg/m³
2,2'-methylenediphenyl diisocyanate
CAS: 2536-05-2, EINECS/ELINCS: 219-799-4, EU-INDEX: 615-005-00-9, Reg-No.: 01-2119927323-43-XXXX
Long-term exposure: 0,02 mg/m³, as NCO, Sen
Short-term exposure (15-minute): 0,07 mg/m³

DNEL

Substance
2,2'-methylenediphenyl diisocyanate, CAS: 2536-05-2
Industrial, inhalative, Acute - local effects, 0.1 mg/m³
Industrial, dermal, Acute - local effects, 28.7 mg/cm²
Industrial, inhalative, Acute - systemic effects, 0.1 mg/m³
Industrial, inhalative, Long-term - systemic effects, 0.05 mg/m³
Industrial, inhalative, Long-term - local effects, 0.05 mg/m³
Industrial, dermal, Acute - systemic effects, 50 mg/kg
[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8
Industrial, dermal, Acute - systemic effects, 21 mg/kg
Industrial, inhalative, Acute - systemic effects, 147 mg/m³
Industrial, dermal, Long-term - systemic effects, 21 mg/kg
Industrial, inhalative, Long-term - systemic effects, 147 mg/m³
o-(p-isocyanatobenzyl)phenyl isocyanate, CAS: 5873-54-1
Industrial, dermal, Acute - systemic effects, 50 mg/kg
Industrial, inhalative, Acute - systemic effects, 0.1 mg/m³
Industrial, dermal, Acute - local effects, 28.7 mg/cm²
Industrial, inhalative, Long-term - local effects, 0.05 mg/m³
Industrial, inhalative, Acute - local effects, 0.1 mg/m³
general population, inhalative, Long-term - local effects, 0.025 mg/m³
general population, inhalative, Acute - local effects, 0.05 mg/m³
4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8
Industrial, inhalative, Long-term - local effects, 0.05 mg/m³
Industrial, inhalative, Acute - local effects, 0.1 mg/m³

general population, inhalative, Acute - local effects, 0.05 mg/m³
general population, inhalative, Long-term - local effects, 0.025 mg/m³

PNEC

Substance
2,2'-methylenediphenyl diisocyanate, CAS: 2536-05-2
sewage treatment plants (STP), > 1 mg/l
soil, > 1 mg/kg
seawater, > 0.1 mg/l
freshwater, > 1 mg/l
[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8
seawater, 0.1 mg/l
sediment, 0.79 mg/kg
soil, 0.13 mg/kg
freshwater, 1 mg/l
o-(p-isocyanatobenzyl)phenyl isocyanate, CAS: 5873-54-1
sewage treatment plants (STP), > 1 mg/l
freshwater, > 1 mg/l
soil, > 1 mg/kg
seawater, > 0.1 mg/l
4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8
seawater, 0.37 µg/L
soil, 2.33 mg/kg soil dw
sediment (freshwater), 11.7 mg/kg sediment dw
sediment (seawater), 1.17 mg/kg sediment dw
freshwater, 3.7 µg/L

8.2 Exposure controls

Additional advice on system design
Ensure adequate ventilation on workstation.
Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.

Eye protection
safety glasses (EN 166:2001)

Hand protection
The details concerned are recommendations. Please contact the glove supplier for further information.
≥ 0.35-0.5 mm. Butyl rubber, >480 min (EN 374-1/-2/-3).
≥ 0.35-0.5 mm. Nitrile rubber, >480 min (EN 374-1/-2/-3).
≥ 0.35-0.5 mm. Polychloroprene, >480 min (EN 374-1/-2/-3).
≥ 0.35-0.5 mm. Viton, >480 min (EN 374-1/-2/-3).

Skin protection
Protective clothing (EN 340)

Other
Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Do not breathe vapour/spray.
Avoid contact with eyes and skin.

Respiratory protection
In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection.
Short term: filter apparatus, combination filter A-P2. (DIN EN 14387)

Thermal hazards
No information available.

Delimitation and monitoring of the environmental exposition
Comply with applicable environmental regulations limiting discharge to air, water and soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Color	brown
Odor	characteristic
Odour threshold	No information available.
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	> 300
Flash point [°C]	> 200
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	< 0.0001 hPa (20°C)
Density [g/cm³]	1.17 (20°C)
Relative density	No information available.
Bulk density [kg/m³]	not applicable
Solubility in water	immiscible
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	not applicable
Kinematic viscosity	No information available.
Relative vapour density	No information available.
Evaporation speed	No information available.
Melting point [°C]	No information available.
Auto-ignition temperature	> 400 °C
Decomposition temperature [°C]	No information available.
Particle characteristics	not applicable

9.2 Other information

Dynamic viscosity: 500 - 1000 mPas (23°C).

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.
In closed containers rise of pressure.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).
Polymerization may occur at elevated temperature.

10.3 Possibility of hazardous reactions

Reactions with water, with formation of carbon dioxide.
Exothermic reaction at:
Reactions with alcohols.
Reactions with amines.
Reactions with alkalies (lyes).
Reactions with acids.

10.4 Conditions to avoid

Strong heating.
Sensitive to moisture.

10.5 Incompatible materials

See SECTION 10.3.

10.6 Hazardous decomposition products

No dangerous reactions known if used as directed.
In the event of fire: See SECTION 5.

SECTION 11: Toxicological information

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

Acute oral toxicity

Substance
2,2'-methylenediphenyl diisocyanate, CAS: 2536-05-2
LD50, oral, Rat, > 2000 mg/kg
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
LD50, oral, Rat, > 10000 mg/kg (OECD 401)
[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8
LD50, oral, Rat, 8025 mg/kg (OECD TG 401)
NOAEL, oral, Rat, 500 mg/kg/28d (OECD TG 407)
o-(p-isocyanatobenzyl)phenyl isocyanate, CAS: 5873-54-1
LD50, oral, Rat, > 2000 mg/kg
4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8
LD50, oral, Rat, > 2000 mg/kg

Acute dermal toxicity

Substance
2,2'-methylenediphenyl diisocyanate, CAS: 2536-05-2
LD50, dermal, Rabbit, > 9400 mg/kg (OECD 402)
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
LD50, dermal, Rabbit, > 9400 mg/kg (OECD 402)
[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8
LD50, dermal, Rabbit, 4250 mg/kg (OECD TG 402)
o-(p-isocyanatobenzyl)phenyl isocyanate, CAS: 5873-54-1
LD50, dermal, Rabbit, > 9400 mg/kg
4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8
LD50, dermal, Rabbit, > 9400 mg/kg (OECD 402)

Acute inhalational toxicity

Substance
2,2'-methylenediphenyl diisocyanate, CAS: 2536-05-2
inhalative, Conversion value: 1.5 mg/l/4h (Dust/mist)
LC50, inhalative, Rat, 0.527 mg/l/4h (OECD 403)
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
LC50, inhalativ (mist), Rat, 0.31 mg/l/4h (OECD 403)
NOAEL, inhalative, Rat, 0.2 mg/m³ (OECD 453)
LOAEL, inhalative, Rat, 1 mg/m³ (OECD 453)
ATE, inhalativ (mist), 1.5 mg/l
[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8
LC50, inhalative, Rat, 5.3 mg/l (OECD TG 403)
NOAEL, inhalative, Rat, 0.225 mg/kg/14d (OECD 412)
o-(p-isocyanatobenzyl)phenyl isocyanate, CAS: 5873-54-1
inhalative, Conversion value: 1.5 mg/l/4h (Dust/mist)
LC50, inhalative, Rat, 0.431 mg/l/4h
4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8
LC50, inhalativ (dust), Rat, 0.49 mg/l/4h

LC50, inhalative, Rat, > 2.24 mg/l/1h (OECD 403)
LC50, inhalative, Rat, 0.368 mg/l/4h (OECD 403)
Conversion value, inhalativ (dust), 1.5 mg/l/4h

Serious eye damage/irritation Irritant
Calculation method

Substance
2,2'-methylenediphenyl diisocyanate, CAS: 2536-05-2
irritant
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
Eye, irritant
[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8
Eye, Rabbit, OECD 405, corrosive
o-(p-isocyanatobenzyl)phenyl isocyanate, CAS: 5873-54-1
Eye, Human, irritant, occupational case reports (NIOSH 1994),
4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8
Rabbit, in vivo, OECD 405, non-irritating

Skin corrosion/irritation Irritant
Calculation method

Substance
2,2'-methylenediphenyl diisocyanate, CAS: 2536-05-2
irritant
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
dermal, Rabbit, OECD 404, irritant
[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8
dermal, Rabbit, OECD 404, non-irritating
o-(p-isocyanatobenzyl)phenyl isocyanate, CAS: 5873-54-1
dermal, Human, irritant, occupational case reports (NIOSH 1994),
4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8
Rabbit, in vivo, OECD 404, irritant

Respiratory or skin sensitisation May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
Calculation method

Substance
2,2'-methylenediphenyl diisocyanate, CAS: 2536-05-2
inhalative, sensitising
dermal, sensitising
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
inhalative, Rat, sensitising
dermal, mouse, OECD 429, sensitising
[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8
dermal, Guinea pig, OECD 406, negativ
o-(p-isocyanatobenzyl)phenyl isocyanate, CAS: 5873-54-1
inhalative, sensitising
dermal, sensitising
4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8
inhalative, Rat, in vivo. OECD-GD 39, sensitising

dermal, mouse, in vivo (LLNA), OECD 429, sensitising

Specific target organ toxicity — single exposure

May cause respiratory irritation.
Calculation method

Substance
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
inhalative, irritant
4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8
inhalative, irritant

Specific target organ toxicity — repeated exposure

Ingredients:
CAS 101-68-8; CAS 5873-54-1; CAS 2536-05-2: May cause damage to organs through prolonged or repeated exposure through inhalation.
Product:
May cause damage to organs through prolonged or repeated exposure.
Calculation method

Substance
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
inhalative, adverse effect observed
[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8
NOAEL, oral, Rat, 1000 mg/kg bw/day, OECD 408, negativ
o-(p-isocyanatobenzyl)phenyl isocyanate, CAS: 5873-54-1
LOAEC, inhalative, Rat, 1 mg/m³, In vivo study, adverse effect observed
4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8
LOAEC, inhalative, Rat, 1 mg/m³, adverse effect observed

Mutagenicity

Based on the available information, the classification criteria are not fulfilled.

Substance
2,2'-methylenediphenyl diisocyanate, CAS: 2536-05-2
in vivo, negativ
in vitro, negativ
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
in vivo, negativ
in vitro, negativ
[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8
OECD 471, negativ
o-(p-isocyanatobenzyl)phenyl isocyanate, CAS: 5873-54-1
In vitro study, negativ
4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8
inhalative, Rat, in vivo, OECD 474, negativ

Reproduction toxicity

Based on the available information, the classification criteria are not fulfilled.

Substance
2,2'-methylenediphenyl diisocyanate, CAS: 2536-05-2
NOAEC, inhalative, Rat, 4 mg/m³ (Effect on developmental toxicity), no adverse effect observed
NOAEC, inhalative, Rat, 200 µg/m³ (Effect on fertility), no adverse effect observed
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
NOAEL, inhalative, Rat, 4 mg/m3, OECD 414, 6h, no adverse effect observed, Effect on developmental toxicity,
[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8
NOAEL, oral, Rat, 1000 mg/kg bw/day, OECD 415, negativ

o-(p-isocyanatobenzyl)phenyl isocyanate, CAS: 5873-54-1
NOAEC, inhalative, Rat, 4 mg/m³, negativ, Effect on developmental toxicity,
NOAEC, inhalative, Rat, 0.2 mg/m³, negativ, Effects on fertility,
4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8
NOAEC, inhalative, Rat, 4 mg/m³ (Effect on developmental toxicity), no adverse effect observed
NOAEC, inhalative, Rat, 200 µg/m³ (Effect on fertility), no adverse effect observed

Carcinogenicity

Suspected of causing cancer.
Calculation method

Substance
2,2'-methylenediphenyl diisocyanate, CAS: 2536-05-2
NOAEC, inhalative, Rat, 1 mg/m³
[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8
Study, negativ
o-(p-isocyanatobenzyl)phenyl isocyanate, CAS: 5873-54-1
NOAEC, inhalative, Rat, 1 mg/m³, positive
4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8
NOAEC, Rat, 1 mg/m³, adverse effect observed

Aspiration hazard

Based on the available information, the classification criteria are not fulfilled.

General remarks

Toxicological data of complete product are not available.

11.2 Information on other hazards

Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other information

none

SECTION 12: Ecological information

12.1 Toxicity

Substance
2,2'-methylenediphenyl diisocyanate, CAS: 2536-05-2
LC50, (96h), Danio rerio, > 1000 mg/l (OECD 203)
EC50, (72h), Scenedesmus subspicatus, > 1640 mg/l (OECD 201)
EC50, (24h), Daphnia magna, > 1000 mg/l (OECD 202)
EC50, (3h), Bacteria, > 100 mg/l (OECD 209)
NOEC, (21d), Daphnia magna, > 10 mg/l (OECD 202)
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
LC50, (96h), Danio rerio, > 1000 mg/l (OECD 203)
EC50, (3h), Bacteria, > 100 mg/l (OECD 209)
EC50, (24h), Daphnia magna, > 1000 mg/l (OECD 202)
NOEC, (21d), Daphnia magna, > 10 mg/l (OECD 202)
ErC50, (72h), Scenedesmus subspicatus, > 1640 mg/l (OECD 201)
[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8
LC50, (96h), Cyprinus carpio, 55 mg/l
EC50, Algae, 119 mg/l /7d
EC50, (48h), Daphnia magna, 324 mg/l
LC0, (96h), Cyprinus carpio, 30 mg/l
NOEC, (3h), Bacteria, > 100 mg/l (OECD TG 209)
NOEC, Algae, < 50 mg/l /7d
NOEC, (21d), Daphnia magna, 100 mg/l (OECD 202)
o-(p-isocyanatobenzyl)phenyl isocyanate, CAS: 5873-54-1
LC50, (96h), fish, > 1000 mg/l
EC50, (3h), Bacteria, > 100 mg/l (OECD 209)
EC50, (24h), Daphnia magna, > 1000 mg/l
NOEC, (21d), Daphnia magna, > 10 mg/l (OECD 202)
ErC50, (72h), Scenedesmus subspicatus, > 1640 mg/l (OECD 201)
4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8
LC50, (96h), Danio rerio, > 1000 mg/l (OECD 203)
ErC50, (72h), Scenedesmus subspicatus, > 1640 mg/l (OECD 201)

12.2 Persistence and degradability

Behaviour in environment compartments No information available.

Behaviour in sewage plant No information available.

Biological degradability The product is not biodegradable.
CAS 101-68-8: 0%. 28d (OECD 302 C)
CAS 5873-54-1: 0%. 28d (OECD 302 C)
CAS 2530-83-8: 37%. 28d (EC C4-A)

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

The product is insoluble in water.

12.5 Results of PBT and vPvB assessment

not applicable

12.6 Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Isocyanate reacts with water at the interface forming CO2 and a solid insoluble product with high melting point (polyurea). This reaction is accelerated by surfactants (e.g. detergents) or by watersoluble solvents. Previous experience shows that polyurea is inert and non-degradable.
Ecological data of complete product are not available.
Do not discharge product unmonitored into the environment or into the drainage.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.
Coordinate disposal with the authorities if necessary.

Waste no. (recommended) 080501*

Contaminated packaging

Uncontaminated packaging may be taken for recycling.
Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended) 150110* packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.2 UN proper shipping name

Transport by land according to ADR/RID	NO DANGEROUS GOODS
Inland navigation (ADN)	NO DANGEROUS GOODS
Marine transport in accordance with IMDG	NOT CLASSIFIED AS "DANGEROUS GOODS"
Air transport in accordance with IATA	NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.4 Packing group

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.5 Environmental hazards

Transport by land according to ADR/RID	no
Inland navigation (ADN)	no
Marine transport in accordance with IMDG	no
Air transport in accordance with IATA	no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

EEC-REGULATIONS	2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2021); IMDG-Code (2021, 40. Amdt.); IATA-DGR (2022)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (2010/75/CE)	not applicable

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

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

H318 Causes serious eye damage.
EUH204 Contains isocyanates. May produce an allergic reaction.
H317 May cause an allergic skin reaction.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H315 Causes skin irritation.
H335 May cause respiratory irritation.
H319 Causes serious eye irritation.
H373 May cause damage to organs through prolonged or repeated exposure through inhalation.
H332 Harmful if inhaled.
H351 Suspected of causing cancer.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Customs Tariff not determined

Classification procedure

Carc. 2: H351 Suspected of causing cancer. (Calculation method)
Acute Tox. 4: H332 Harmful if inhaled. (Calculation method)
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure. (Calculation method)
Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)
Skin Irrit. 2: H315 Causes skin irritation. (Calculation method)
STOT SE 3: H335 May cause respiratory irritation. (Calculation method)
Resp. Sens. 1: H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. (Calculation method)
Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)

Modified position SECTION 2 been added: As from 24 August 2023 adequate training is required before industrial or professional use

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

1.1 Product identifier

WOMI W246 2K Plastic repair Flex 25 ml in blister (Part B)

Article number: 5570246
UFI: PYUC-3HW1-J554-5WFT

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

1.2.1 Relevant uses

Adhesive

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

Service Best B.V.
De Schakel 60
5651 GH Eindhoven/ the Netherlands
Phone +31 (0)40 230 2345
Fax
Homepage
E-mail info@servicebest.com

Address enquiries to

Technical information info@servicebest.com

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Advisory body +31 (0) 30 2748888

Company

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

Skin Irrit. 2: H315 Causes skin irritation.
Eye Dam. 1: H318 Causes serious eye damage.
Skin Sens. 1: H317 May cause an allergic skin reaction.

2.2 Label elements

The product is classified and required to be labelled in accordance with EC-Directives

Hazard pictograms





Signal word DANGER

Contains: 4,4'-Methylenebis(cyclohexylamine)

Trimethoxyvinylsilane

Hazard statements

H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P280 Wear protective gloves / eye protection / face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER / doctor.
P333+P313 If skin irritation or rash occurs: Get medical advice / attention.
P501 Dispose of contents/container in accordance with local/national regulation.

2.3 Other hazards

Human health dangers Contains no ingredients with endocrine-disrupting properties.

Environmental hazards This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Contains no ingredients with endocrine-disrupting properties.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
50 - < 80	Ethylenediamine, propoxylated
	CAS: 25214-63-5, EINECS/ELINCS: 500−035−6, Reg-No.: 01-2119471485-32-XXXX
	GHS/CLP: Eye Irrit. 2: H319
< 5	4,4'-Methylenebis(cyclohexylamine)
	CAS: 1761-71-3, EINECS/ELINCS: 217-168-8, Reg-No.: 01-2119541673-38-XXXX
	GHS/CLP: Acute Tox. 4: H302 - Skin Corr. 1B: H314 - Eye Dam. 1: H318 - Skin Sens. 1B: H317 - STOT RE 2: H373
< 5	Trimethoxyvinylsilane
	CAS: 2768-02-7, EINECS/ELINCS: 220-449-8, EU-INDEX: 014-049-00-0, Reg-No.: 01-2119513215-52-XXXX
	GHS/CLP: Flam. Liq. 3: H226 - Acute Tox. 4: H332 - Skin Sens. 1B: H317

Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Remove contaminated soaked clothing immediately and dispose of safely.
Remove affected person from danger area, lay down.
Place and transport casualty in recovery position.

Inhalation Remove the victim into fresh air and keep him calm.
In the event of symptoms seek medical treatment.

Skin contact In case of contact with skin wash off immediately with soap and water.
If skin irritation or rash occurs: Get medical advice/attention.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Consult a doctor immediately.
Shield unaffected eye.

Ingestion Consult a doctor immediately.
Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
Forward this sheet to your doctor.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide.
Dry powder.
Water spray jet.
Alcohol-resistant foam.

Extinguishing media that must not be used

Full water jet

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.

5.3 Advice for firefighters

Do not inhale explosion and/or combustion gases.
Use self-contained breathing apparatus.

Collect contaminated firefighting water separately, must not be discharged into the drains.
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.
Wear suitable protective equipment. For personal protection see SECTION 8.
High risk of slipping due to leakage/spillage of product.

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, universal absorbent, diatomaceous earth).
Dispose of absorbed material in accordance within the regulations.
Ensure adequate ventilation.

6.4 Reference to other sections

See SECTION 7+8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.
Avoid contact with eyes and skin. Use personal protective equipment.
Open and handle container with care.

Do not eat, drink or smoke when using this product.
Wash hands before breaks and after work.
Use barrier skin cream.
Contaminated work clothing should not be allowed out of the workplace.
Take off contaminated clothing and wash before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Prevent penetration into the ground.

Do not store together with oxidizing agents.

Keep container tightly closed.
Keep container in a well-ventilated place.
Store in a dry place.
Protect from atmospheric moisture and water.
Do not keep at temperatures above 50 °C.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

not applicable

DNEL

Substance
Ethylenediamine, propoxylated, CAS: 25214-63-5
Industrial, inhalative, Long-term - systemic effects, 98 mg/m³
Industrial, dermal, Long-term - systemic effects, 13.9 mg/kg bw/d
general population, oral, Long-term - systemic effects, 8.3 mg/kg bw/d
general population, dermal, Long-term - systemic effects, 8.3 mg/kg bw/d
general population, inhalative, Long-term - systemic effects, 29 mg/m³
Trimethoxyvinylsilane, CAS: 2768-02-7
Industrial, dermal, Long-term - systemic effects, 3.9 mg/kg bw/day
Industrial, inhalative, Acute - systemic effects, 260 mg/m³
Industrial, inhalative, Long-term - systemic effects, 27.6 mg/m³
general population, dermal, Long-term - systemic effects, 7.8 mg/kg bw/day
general population, oral, Long-term - systemic effects, 0.3 mg/kg bw/day
general population, inhalative, Long-term - systemic effects, 6.7 mg/m³
4,4'-Methylenebis(cyclohexylamine), CAS: 1761-71-3
Industrial, dermal, Long-term - systemic effects, 0.1 mg/kg bw/d
Industrial, inhalative, Long-term - systemic effects, 1 mg/m³
general population, dermal, Long-term - systemic effects, 0.06 mg/kg bw/d
general population, inhalative, Long-term - systemic effects, 0.21 mg/m³
general population, oral, Long-term - systemic effects, 0.06 mg/kg bw/d

PNEC

Substance
Ethylenediamine, propoxylated, CAS: 25214-63-5
freshwater, 0.085 mg/l
sewage treatment plants (STP), 70 mg/l
soil, 0.0162 mg/kg dw
sediment (seawater), 0.0074 mg/kg dw
sediment (freshwater), 0.074 mg/kg dw
freshwater, 0.0085 mg/l
Trimethoxyvinylsilane, CAS: 2768-02-7
sediment (freshwater), 1.5 mg/kg dw
sediment (seawater), 0.15 mg/kg dw
soil, 0.06 mg/kg dw
freshwater, 400 µg/L
seawater, 40 µg/L
4,4'-Methylenebis(cyclohexylamine), CAS: 1761-71-3
freshwater, 0.008 mg/l
seawater, 0.0008 mg/l
sewage treatment plants (STP), 80 mg/l
sediment (freshwater), 0.39 mg/kg dw

soil, 0.072 mg/kg dw
sediment (seawater), 0.039 mg/kg dw

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	Tightly fitting goggles. (EN 166:2001)
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. In full contact: ≥ 0.35-0.5 mm Nitrile rubber, >480 min (EN 374-1/-2/-3). ≥ 0.35-0.5 mm Butyl rubber, >480 min (EN 374-1/-2/-3). ≥ 0.35-0.5 mm Neoprene, >480 min (EN 374-1/-2/-3).
Skin protection	Protective clothing (EN 340)
Other	Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier. Do not inhale vapours. Avoid contact with eyes and skin.
Respiratory protection	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, combination filter A-P2. (DIN EN 14387)
Thermal hazards	not applicable
Delimitation and monitoring of the environmental exposition	Comply with applicable environmental regulations limiting discharge to air, water and soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Color	various black colourless clear
Odor	characteristic
Odour threshold	No information available.
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	No information available.
Flash point [°C]	> 150
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	No information available.
Density [g/cm³]	1.02 (20°C)
Relative density	No information available.
Bulk density [kg/m³]	not applicable
Solubility in water	immiscible
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	not applicable
Kinematic viscosity	No information available.
Relative vapour density	No information available.
Evaporation speed	No information available.
Melting point [°C]	No information available.
Auto-ignition temperature	> 300°C
Decomposition temperature [°C]	No information available.
Particle characteristics	not applicable

9.2 Other information

Dynamic viscosity: 1400 - 1800 mPas (23°C).

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with oxidizing agents.
Reactions with isocyanates.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

See SECTION 10.3.

10.6 Hazardous decomposition products

No dangerous reactions known if used as directed.

SECTION 11: Toxicological information

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

Acute oral toxicity

Substance
Ethylenediamine, propoxylated, CAS: 25214-63-5
LD50, oral, Rat, > 2000 mg/kg bw
NOAEL, oral, Rat, 1000 mg/kg bw/4w
Trimethoxyvinylsilane, CAS: 2768-02-7
LD50, oral, Rat, 7120 mg/kg (OECD TG 401)
NOAEL, oral, Rat, < 62.5 mg/kg (28 d) (OECD TG 422)
4,4'-Methylenebis(cyclohexylamine), CAS: 1761-71-3
LD50, oral, Rat, 625 mg/kg

Acute dermal toxicity

Substance
Ethylenediamine, propoxylated, CAS: 25214-63-5
LD50, dermal, Rat, > 2000 mg/kg bw
Trimethoxyvinylsilane, CAS: 2768-02-7
LD50, dermal, Rabbit, 3259 mg/kg bw
4,4'-Methylenebis(cyclohexylamine), CAS: 1761-71-3
LD50, dermal, Rabbit, 2110 mg/kg

Acute inhalational toxicity

Substance
Trimethoxyvinylsilane, CAS: 2768-02-7
LD50, inhalative, Rat, 16.8 mg/l (4 h) (OECD TG 403)
NOAEL, inhalative, Rat, 0.058 mg/l (98 d)

Serious eye damage/irritation Risk of serious damage to eyes.
Calculation method

Substance
Ethylenediamine, propoxylated, CAS: 25214-63-5
Rabbit, in vivo, OECD 405, irritant
Trimethoxyvinylsilane, CAS: 2768-02-7
Eye, Rabbit, OECD 405, 24h, non-irritating

Skin corrosion/irritation Irritant
Calculation method

Substance
Ethylenediamine, propoxylated, CAS: 25214-63-5
Rabbit, in vivo, OECD 404, Slight irritant effect - does not require labelling.
Trimethoxyvinylsilane, CAS: 2768-02-7
dermal, Rabbit, 24h, non-irritating

Respiratory or skin sensitisation May cause an allergic skin reaction.
Calculation method

Substance
Ethylenediamine, propoxylated, CAS: 25214-63-5

Guinea pig, in vivo, OECD 406, non-sensitizing
Trimethoxyvinylsilane, CAS: 2768-02-7
dermal, ECHA, sensitising

Specific target organ toxicity — single exposure Based on the available information, the classification criteria are not fulfilled.

Specific target organ toxicity — repeated exposure Based on the available information, the classification criteria are not fulfilled.

Substance
Trimethoxyvinylsilane, CAS: 2768-02-7
NOAEL, inhalation (vapour), Rat, 0.058 mg/kg, OECD 413

Mutagenicity Based on the available information, the classification criteria are not fulfilled.

Substance
Ethylenediamine, propoxylated, CAS: 25214-63-5
Chinese hamster lung fibroblasts (V79), OECD 473, negativ
Trimethoxyvinylsilane, CAS: 2768-02-7
in vitro, OECD 471, negativ

Reproduction toxicity Based on the available information, the classification criteria are not fulfilled.

Substance
Ethylenediamine, propoxylated, CAS: 25214-63-5
NOAEL, oral, Rat, 1000 mg/kg bw/d (Effect on developmental toxicity), no adverse effect observed
NOAEL, oral, Rat, 1000 mg/kg bw/d (Effect on fertility), no adverse effect observed
Trimethoxyvinylsilane, CAS: 2768-02-7
Rat, OECD 422, negativ

Carcinogenicity Based on the available information, the classification criteria are not fulfilled.

Aspiration hazard Based on the available information, the classification criteria are not fulfilled.

General remarks

Toxicological data of complete product are not available.

11.2 Information on other hazards

Endocrine disrupting properties The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other information none

SECTION 12: Ecological information

12.1 Toxicity

Substance
Ethylenediamine, propoxylated, CAS: 25214-63-5
LC50, (96h), Leuciscus idus, 4600 mg/l
EC50, (48h), Daphnia magna, > 100 mg/l
ErC50, (72h), Desmodesmus subspicatus, 150.67 mg/l
Trimethoxyvinylsilane, CAS: 2768-02-7
LC50, (96h), Oncorhynchus mykiss, 191 mg/l
EC50, Pseudokirchneriella subcapitata, 210 mg/l (7 d) (US-EPA)
EC50, (48h), Daphnia magna, 168.7 mg/l (92/69/EWG C.2)
EC10, Pseudomonas putida, 1000 mg/l (5 h)
4,4'-Methylenebis(cyclohexylamine), CAS: 1761-71-3
LC50, (96h), Leuciscus idus, > 100 mg/l
EC50, (72h), Algae, 140 - 200 mg/l
EC50, (48h), Daphnia magna, 6.84 mg/l
LC0, (96h), Leuciscus idus, 46 mg/l

12.2 Persistence and degradability

Behaviour in environment compartments No information available.

Behaviour in sewage plant No information available.

Biological degradability
CAS 25214-63-5: 9%. 28d (OECD 301 F)
CAS 25214-63-5: 20 - 36%. 28d (OECD 302 / 302 B)
CAS 1761-71-3: < 10%. 28d (OECD 302 B)
CAS 1761-71-3: 0%. 28d (OECD 301 C)
CAS 2768-02-7: The product is readily biodegradable.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

The product is insoluble in water.

12.5 Results of PBT and vPvB assessment

not applicable

12.6 Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Ecological data of complete product are not available.
Do not discharge product unmonitored into the environment or into the drainage.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.
For recycling, consult manufacturer.

Waste no. (recommended) 080409*

Contaminated packaging

Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended) 150110* packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.2 UN proper shipping name

Transport by land according to ADR/RID	NO DANGEROUS GOODS
Inland navigation (ADN)	NO DANGEROUS GOODS
Marine transport in accordance with IMDG	NOT CLASSIFIED AS "DANGEROUS GOODS"
Air transport in accordance with IATA	NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.4 Packing group

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.5 Environmental hazards

Transport by land according to ADR/RID	no
Inland navigation (ADN)	no
Marine transport in accordance with IMDG	no
Air transport in accordance with IATA	no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

EEC-REGULATIONS	2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2021); IMDG-Code (2021, 40. Amdt.); IATA-DGR (2022)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (2010/75/CE)	0 %

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H332 Harmful if inhaled.
H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H373 May cause damage to hearing organs through prolonged or repeated exposure.
H317 May cause an allergic skin reaction.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H302 Harmful if swallowed.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Customs Tariff not determined

Classification procedure Skin Irrit. 2: H315 Causes skin irritation. (Calculation method)
Eye Dam. 1: H318 Causes serious eye damage. (Calculation method)
Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)

Modified position none

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