

SHUFIX WHITE SUPER FAST (A) 25ML/160ML/200ML/250ML

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 3/19/2021 Revision date: 3/25/2021 Supersedes version of: 3/3/2021 Version: 3.2

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

1.1. Product identifier

Product form : Mixture
Trade name : SHUFIX WHITE SUPER FAST (A) 25ML/160ML/200ML/250ML
Product code : 150301025/150301160/150301200/150101250

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

1.2.1. Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Curing agent

1.2.2. Uses advised against

Restrictions on use : No additional information available

1.3. Details of the supplier of the safety data sheet

Glue-U Adhesives B.V.
Droogdokkeneiland , 8
5026 SR Tilburg – Noord-Brabant
Nederland
T 013 - 545 3118
sales@glue-u.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity (inhal.), 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

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

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

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

Hazard pictograms (CLP)



GHS07

GHS08

Signal word (CLP)

: Danger

Contains

: 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.

Precautionary statements (CLP)

: P260 - Do not breathe dust, fume, gas, mist, spray, vapours.
P280 - Wear eye protection, face protection, protective gloves.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P342+P311 - If experiencing respiratory symptoms: Call doctor, a POISON CENTER.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P501 - Dispose of Contents and container, to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH-statements : EUH204 - Contains isocyanates. May produce an allergic reaction.
Extra phrases : As from 24 August 2023 adequate training is required before industrial or professional use.

EUH-statements

Extra phrases

2.3. Other hazards

Other hazards which do not result in classification

: Reacts with water, generates gases or heat. This substance / mixture does not contain components considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

No data available

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
4,4'-METHYLENEDIPHENYL DIISOCYANATE substance with a Community workplace exposure limit	CAS-No.: 101-68-8 EC-No.: 202-966-0 EC Index-No.: 615-005-00-9	10 – 30	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

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Specific concentration limits:		
Name	Product identifier	Specific concentration limits
4,4'-METHYLENEDIPHENYL DIISOCYANATE	CAS-No.: 101-68-8 EC-No.: 202-966-0 EC Index-No.: 615-005-00-9	(0.1 ≤C ≤ 100) Resp. Sens. 1, H334 (5 ≤C ≤ 100) STOT SE 3, H335 (5 ≤C ≤ 100) Skin Irrit. 2, H315 (5 ≤C ≤ 100) Eye Irrit. 2, H319

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 after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. Call a physician immediately. May cause irritation or asthma-like symptoms. Symptoms may be delayed. These complaints can be noticeable immediately but also later.
- First-aid measures after skin contact : Remove contaminated clothing and shoes. Brush off loose particles from skin. Wash immediately with plenty of soap and water. (warm water is recommended if readily available).
- First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Contact ophthalmologist immediately.
- First-aid measures after ingestion : Give nothing to drink. Do NOT induce vomiting. Get immediate medical advice/attention.

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

- Symptoms/effects : No characteristic features and effects known.
- Symptoms/effects after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause sensitisation of susceptible persons by inhalation.
- Symptoms/effects after skin contact : Causes skin irritation.
- Symptoms/effects after eye contact : May cause severe irritation. Redness.
- Symptoms/effects after ingestion : Irritation to throat and respiratory system. Shortness of breath.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Dry chemical, CO₂, or water spray or regular foam. For a significant fire : alcohol-resistant foam. Recommended. General purpose synthetic foams (including AFFF) or protein foams may function but much less effectively.
- Unsuitable extinguishing media : Water is not recommended, but can be used in very large quantities as a fine mist when other extinguishing agents are not available.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Protection during firefighting : All fire-fighting personnel must wear safety suits. including. Self-contained breathing apparatus. Do not attempt to take action without suitable protective equipment. Do not enter fire area without proper protective equipment, including respiratory protection.
- Other information : Fire could produce a combination of irritating and toxic gases. Thermal decomposition. and/or. incineration. Reacts with water, generates gases or heat.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove all sources of ignition. Ventilate spillage area. Dike and contain spill. Stop leak if safe to do so.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment. Approved supplied-air respirator when exposed to vapours from heated material.

Emergency procedures : Keep unprotected people away. Do not breathe vapours. Ventilate spillage area.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Cover the spill with clay, sand, sawdust, vermiculite, fullers earth, or any suitable adsorbent material. Contain spilled material and keep further waste under control if possible.

Methods for cleaning up : Shovel into suitable and closed container for disposal. Carefully neutralize spilled liquid, using : a mixture of : water (80%) with non-ionic surfactant Tergitol TMN-10 (20%), OR water (90%), concentrated ammonia (3-8%) and detergent (2%). Add about 10 parts of neutralizer per part of Isocyanate while mixing, . Leave uncovered for 48 hours to allow carbon dioxide to escape. If ammonia is used, use good ventilation to avoid exposure to vapor. Large amounts can be closed, but not be pumped into sealed containers. For further information refer to section 13.

6.4. Reference to other sections

Hazardous combustion products, See Heading 5. Wear personal protective clothing (see chapter 8). Information regarding storage, see chapter 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : The substance must be handled in accordance with good industrial hygiene and safety procedures. These procedures prevent unnecessary exposure and contact with skin, eyes and clothing. Education and training of workers in the safe use and handling of this material is required. Provide adequate ventilation. Use only outdoors or in a well-ventilated area.

Hygiene measures : Always wash hands after handling the product. Do not eat, drink or smoke when using this product. Remove contaminated clothes. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep in a cool, well-ventilated place away from heat. Store at temperatures not exceeding 18 °C - 30 °C. Keep container tightly closed. Avoid exposing the product to humidity and ensure that a nitrogen atmosphere always remains in the containers. Store this product so that it cannot come into contact with moisture / water to avoid hazardous reactions. For further information, refer to section 10 : "Stability and Reactivity". Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Incompatible materials : Acids, alkalis and oxidizing agent. Polyols and amines. Alcohol. Metal compounds. Humid air, water. Avoid contact with metals such as aluminum, brass, copper, galvanized metals and zinc.

7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

4,4'-METHYLENEDIPHENYL DIISOCYANATE (101-68-8)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	0.05 mg/m ³
IOEL TWA [ppm]	0.005 ppm

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

4,4'-METHYLENEDIPHENYL DIISOCYANATE (101-68-8)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	0.1 mg/m ³
Long-term - local effects, inhalation	0.05 mg/m ³
DNEL/DMEL (General population)	
Acute - local effects, inhalation	0.05 mg/m ³
Long-term - local effects, inhalation	0.025 mg/m ³
PNEC (Water)	
PNEC aqua (marine water)	0.1 mg/l
PNEC aqua (intermittent, freshwater)	1 mg/l
PNEC (Soil)	
PNEC soil	1 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	1 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Hazard control from vapor or spray mist is ideally performed by the use of engineering controls. MDI levels must be monitored. Provide good extraction / ventilation of the workplace.

8.2.2. Personal protection equipment

Personal protective equipment:

Safety glasses. Gloves. Insufficient ventilation: wear respiratory protection.

Personal protective equipment symbol(s):



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8.2.2.1. Eye and face protection

Eye protection:

(safety glasses). Splash goggles. Chemical goggles. EN 166

8.2.2.2. Skin protection

Skin and body protection:

Completely skin-covering anti-static, chemical and oil resistant clothing. Avoid contact with skin. EN-13034/6. EN 340. EN ISO 13688. EN 1149

Hand protection:

Wear suitable gloves. Check leak tightness / impermeability prior to use. Chemical protective gloves should be selected specifically for the workplace, depending on the concentration and amount of hazardous substances. Consult supplier for specific recommendations. Chemical resistant gloves (according to European standard EN 374 or equivalent). Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Butyl-rubber protective gloves. Polyvinyl alcohol or nitrile-butyl rubber gloves. However, keep in mind that polyvinyl alcohol degrades with water. Time of penetration is to be checked with the glove producer. Since the product consists of several substances, the durability of the glove material cannot be estimated and needs to be tested before use. Layer thickness : $\geq 0,38$ mm. Breakthrough time : > 480 min. Permeation level: 6

Other skin protection

Materials for protective clothing:

Safety footwear

8.2.2.3. Respiratory protection

Respiratory protection:

Ensure exposure is below occupational exposure limits (where available). If this material is handled in other than in a closed system, approved supplied air respirator operated in a positive pressure mode is recommended. Do not inhale aerosols and mists. Use approved respiratory protection equipment if exposure to air is excessive. Avoid inhalation of vapors which can be produced under some conditions such as heating the product. These vapors can be released during processing or when heated. Full / half / quarter mask (EN 136/140). Type ABEK-P2 (combination filter for gases, vapors and particles, color code: brown / gray / yellow / green / white)

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Yellow.
Odour	: Characteristic.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: 208 °C @ 1.013 hPa
Flammability	: Not available
Explosive limits	: Not available
Lower explosion limit	: Not determined.
Upper explosion limit	: Not determined.
Flash point	: > 200 °C
Auto-ignition temperature	: > 601 °C
Decomposition temperature	: Not available
pH	: Not determined.
Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: 5 – 10 mm Hg @ 25 °C
Density	: 1.15 kg/l

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Relative density	: Not available
Relative vapour density at 20 °C	: 8.5 (MDI) (AIR = 1)
Particle characteristics	: No data available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Relative evaporation rate (butylacetate=1)	: Not available
Note	: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guarantee analysis of any specific lot or as specifications for the product.

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7). On contact with water: Unstable.

10.3. Possibility of hazardous reactions

Polymerization can occur, which can be catalyzed by strong bases and water.

10.4. Conditions to avoid

Avoid moisture and temperature above 32 °C and below 18 °C. Product can decompose at elevated temperature.

10.5. Incompatible materials

Avoid contact with acids, alcohol, amines, ammonia, bases, metal compounds, moist air, strong oxidizers, and water. Avoid unintended contact with polyols. Avoid contact with metals such as aluminum, brass, copper, galvanized metals and zinc. Contact with water releases carbon dioxide, which can cause pressure build-up in closed containers.

10.6. Hazardous decomposition products

Heat and fire can cause carbon dioxide, carbon monoxide, aldehydes, acids and other organic substances to form.

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)	: Harmful if inhaled.

SHUFIX WHITE SUPER FAST (A) 25ML/160ML/200ML/250ML	
LD50 oral rat	> 15.8 mg/kg
LD50 dermal rabbit	> 5010 < 7,940 mg/Kg
LC50 Inhalation - Rat	The 4 hour LC50 for polymeric MDI in rats ranges from 370 to 490 mg/m3. The LC50 for monomeric MDI was estimated to be between 172 and 187 mg/m3.
ATE CLP (vapours)	15.71 mg/l/4h
4,4'-METHYLENEDIPHENYL DIISOCYANATE (101-68-8)	
LD50 oral rat	> 2000 mg/kg
LD50 oral	> 5000 mg/kg LD50 oral rat

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4,4'-METHYLENEDIPHENYL DIISOCYANATE (101-68-8)	
LD50 dermal rabbit	> 9400 mg/kg
LC50 Inhalation - Rat	368 mg/m ³
Skin corrosion/irritation	: Irritation to skin. pH: Not determined.
Serious eye damage/irritation	: Causes serious eye damage. Severely irritating to the eyes pH: Not determined.
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
Additional information	: Positive (Salmonella micro some test with metabolic activation; cell transformation assay). As well as negative (mouse lymphoma specific locus mutation test with or without metabolic activation) results have been observed "in vitro". However, MDI was negative in an "in vivo" (mouse micronucleus) assay.
Carcinogenicity	: Suspected of causing cancer.
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified
Additional information	: No data available.

4,4'-METHYLENEDIPHENYL DIISOCYANATE (101-68-8)	
LC50 - Fish [1]	> 1000 mg/l
EC50 - Other aquatic organisms [1]	129.7 mg/l 24 h
EC50 72h - Algae [1]	> 100 mg/l
ErC50 algae	> 1640 mg/l 3 d
NOEC chronic algae	≥ 10 mg/l 21 d

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

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Results of PBT assessment	Mixture does not contain substance (s) classified as PBT or vPvB in concentrations above 0,1%.

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12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Waste treatment methods : Disposal of this packaging should at all times comply with the waste disposal legislation and any regional local authority requirements. Combustion is the recommended method. Empty containers must be handled with care due to product residue. Do not heat or cut empty containers with electric or gas torch.
- Additional information : Avoid discharge of the product as is into the environment.

SECTION 14: Transport information

In accordance with ADR

ADR	
14.1. UN number or ID number	Not regulated
14.2. UN proper shipping name	Not regulated
14.3. Transport hazard class(es)	Not regulated
14.4. Packing group	Not regulated
14.5. Environmental hazards	Not regulated
Not classified as dangerous in the meaning of transport regulations	

14.6. Special precautions for user

- Special transport precautions : Protect from freezing, Store at 18 °C - 30 °C

Overland transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

No data available

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(b)	SHUFIX WHITE SUPER FAST (A) 25ML/160ML/200ML/250 ML	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
56.	4,4'-METHYLENEDIPHENYL DIISOCYANATE	Methylenediphenyl diisocyanate (MDI)
56(a)	4,4'-METHYLENEDIPHENYL DIISOCYANATE	Methylenediphenyl diisocyanate (MDI) isomers: 4,4'-Methylenediphenyl diisocyanate
74.	4,4'-METHYLENEDIPHENYL DIISOCYANATE	Diisocyanates, $O = C=N-R-N = C=O$, with R an aliphatic or aromatic hydrocarbon unit of unspecified length

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

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

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

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

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Other information, restriction and prohibition regulations

: In Annex XVII to Regulation (EC) No 1907/2006, the following entry is added:

'74. Diisocyanates, $O = C = NRN = C = O$, with R an aliphatic or aromatic hydrocarbon moiety of indefinite length

1. Shall not be used as a substance on its own, as a constituent in other substances or in mixtures for industrial and professional use (s) after 24 August 2023 unless:

(a) the concentration of diisocyanates individually and in combination is less than 0.1% by weight, or

(b) the employer or self-employed person ensures that the industrial or professional user (s) has successfully completed training in the safe use of diisocyanates prior to the use of the substance (s) or mixture (s).

2. Shall not be placed on the market as a substance on its own, as a constituent in other substances or in mixtures for industrial and professional use after 24 February 2022 unless:

(a) the concentration of diisocyanates individually and in combination is less than 0.1% by weight, or

(b) the supplier ensures that the recipient of the substance (s) or mixture (s) is provided with information on the requirements referred to in paragraph 1 (b) and that the following declaration is affixed to the packaging, in a visibly distinguished from the rest of the label information: "From August 24, 2023, adequate training is required for industrial or professional use".

3. For the purposes of this entry, "industrial and professional user (s)" means any worker or self-employed person who works alone with diisocyanates, as a constituent of other substances or in mixtures for industrial and professional use, or who supervises these tasks.

4. The training referred to in point (b) of paragraph 1 shall include instructions on how to control exposure of the skin and inhalation to diisocyanates in the workplace, without prejudice to national occupational exposure limits or other appropriate risk management measures at national level. This training is delivered by an occupational safety and health expert with competence acquired through relevant professional training. That training includes at least:

(a) the training elements in point 5 (a) for all industrial and professional applications.

(b) the training elements in points (a) and (b) of paragraph 5 for the following uses:
handle open mixtures at ambient temperature (including foam tunnels);
spraying in a ventilated booth;
apply with a roller;
apply with a brush;
application by dipping and pouring;
mechanical post-treatment (eg cutting) of incompletely cured articles that are no longer hot;
cleaning and waste;
any other use with comparable dermal and / or inhalation exposure;

(c) the training elements in points (a), (b) and (c) of paragraph 5 for the following uses:
handling incompletely cured articles (e.g. freshly cured, still warm);
foundry applications;
maintenance and repair requiring access to equipment;
open handling of warm or hot formulations ($> 45^{\circ}C$);
outdoor spraying, with limited or only natural ventilation (including large industrial work halls) and high energy spraying (e.g. foams, elastomers);
and any other use with similar dermal and / or inhalation exposure.

5. Training elements:

(a) general training, including online training, on:

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chemistry of diisocyanates;
toxicity hazards (including acute toxicity);
exposure to diisocyanates;
occupational exposure limit values;
how sensitization can arise;
smell as an indication of danger;
importance of volatility to risk;
viscosity, temperature and molecular weight of diisocyanates;
personal hygiene;
necessary personal protective equipment, including practical instructions for proper use and its limitations;
risk of skin contact and exposure by inhalation;
risk related to the application process used;
skin and inhalation protection scheme;
ventilation;
cleaning, leaks, maintenance;
throwing away empty packaging;
protection of bystanders;
identification of critical stages of treatment;
specific national code systems (if applicable);
behavior-based safety;
certification or documented evidence that the training has been successfully completed

(b) intermediate level training, including online training, on:

additional behavioral aspects;

maintenance;

change management;

evaluation of existing safety instructions;

risk related to the application process used;

certification or documented evidence that the training has been successfully completed

(c) advanced training, including online training, on: Any additional certification required for the specific uses covered;

spraying outside of a spray booth;

open handling of hot or warm formulations (> 45 ° C);

certification or documented evidence that the training has been successfully completed

6. The training must comply with the provisions of the Member State where the industrial or professional user (s) is (are) employed. Member States may apply or continue to apply their own national rules for the use of the substance (s) or mixture (s), as long as the minimum requirements set out in paragraphs 4 and 5 are met.

7. The supplier referred to in paragraph 2 (b) shall ensure that the recipient receives training material and courses in accordance with paragraphs 4 and 5 in the official language (s) of the Member State (s) where the substance (s) or mixture (s) will be delivered. The training takes into account the specificity of the delivered products, including composition, packaging and design.

8. The employer or self-employed person documents the successful completion of the training as referred to in paragraphs 4 and 5. The training is renewed at least every five years.

9. Member States shall include in their reports pursuant to Article 117 (1) the following information:

(a) any established training requirements and other risk management measures related to the industrial and professional use of diisocyanates as provided for in national legislation;

(b) the number of reported and recognized occupational asthma and occupational respiratory and skin diseases associated with diisocyanates;

(c) National exposure limits for diisocyanates, if any;

(d) information on enforcement activities related to this restriction.

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10. This limitation is without prejudice to other Union legislation on the protection of the safety and health of workers at the workplace. "

Directive 2012/18/EU (SEVESO III)

Seveso Additional information : Not determined.

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

15.1.2. National regulations

Germany

Water hazard class (WGK) 2 : WGK: 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)
Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

ABM category : A(4) - low hazard for aquatic organisms, may have longterm hazardous effects in aquatic environment
SZW-lijst van kankerverwekkende stoffen : None of the components are listed
SZW-lijst van mutagene stoffen : None of the components are listed
SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product
Persons suffering from asthma or eczema and persons who have chronic lung diseases, skin or respiratory allergies to isocyanates should not work with the material
The requirements from the Danish Working Environment Authorities regarding work with epoxy resins and isocyanates must be observed during use and disposal
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

Switzerland

Storage class (LK) : LK 6.1 - Toxic materials

15.2. Chemical safety assessment

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

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Revision date	Modified	
	Supersedes version of	Modified	
2.2	Precautionary statements (CLP)	Modified	
7.1	Precautions for safe handling	Modified	
7.1	Hygiene measures	Added	
7.2	Incompatible materials	Added	
16	Abbreviations and acronyms	Added	

Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

SHUFIX WHITE SUPER FAST (A) 25ML/160ML/200ML/250ML

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Abbreviations and acronyms:

DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
LC50	Median lethal concentration
LD50	Dose leading to death in 50% of a test population (median lethal dose)
NOEC	No-Observed Effect Concentration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
STP	Sewage treatment plant
SDS	Safety Data Sheet
WGK:	Water Hazard Class
vPvB	Very Persistent and Very Bioaccumulative

Data sources	: Information from our suppliers, such as data from "Registered Substances Database" of the European Chemicals Agency (ECHA) is used to compile the safety data sheet. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Classification procedure: . Physical and Chemical Properties: Classification is based on the results of the mixtures tested. Health and Environmental Hazards: The method for classifying mixtures based on the components of the mixture (sum formula).
Training advice	: Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.
Other information	: DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Carc. 2	Carcinogenicity, Category 2
EUH204	Contains isocyanates. May produce an allergic reaction.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
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.

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Full text of H- and EUH-statements:

H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation

Safety Data Sheet (SDS), EU

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