Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

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

1.1. Product identifier

Code: **ESRE113BPSTA**
Product name **SA Omni Shield 2K-PU Comp.B**

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

Intended use **Two-component water-based polyurethane varnish for wooden floor**

Identified Uses	Industrial	Professional	Consumer
Component B	✓	✓	-
Mixing or blending	**ERC: 2.** **PROC: 5, 8a.** **AC: 11, 11a.** **PC: 9a.** **LCS: F, IS.**	**ERC: 2.** **PROC: 5, 8a.** **AC: 11, 11a.** **PC: 9a.**	-

1.3. Details of the supplier of the safety data sheet

Name **Stone Age B.V.**
Full address **Butaanstraat 10**
District and Country **7463PG RIJSSEN (OV)**
THE NETHERLANDS
Tel. +31 548 544 449

e-mail address of the competent person responsible for the Safety Data Sheet **info@stonege.nl**

1.4. Emergency telephone number

For urgent inquiries refer to **Poison centers:**
Cyprus-1401

Denmark- Danish Poison Center (Giftlinjen): +45 8212 1212

Estonia- Estonian Poisoning Information 16662

Finland- Tel. 09 471 977 Or +358 09 4711

Latvia- 1. Valsts ugunsdzēsības un glābšanas dienests, phone number: 112.
2. Toksikoloģijas un sepses klīnikas Saindēšanās un zāļu informācijas centrs, Hipokrāta 2, Rīga, Latvija, LV-1038, phone number +371 67042473

Lithuania- Apsinuodijimų informacijos biuras"visto parą: tel. +370 (5) 236 2052

Malta- 112

Belgium
Belgian Poisono Centre number: 070 245 245
Available 24h/24

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

SECTION 2. Hazards identification ... / >>

Product classification based on the tests carried out on the mixture

Hazard classification and indication:

Acute toxicity, category 4	H332	Harmful if inhaled.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

Signal words: Warning

Hazard statements:

H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements:

P280	Wear protective gloves.
P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P362+P364	Take off contaminated clothing and wash it before reuse.

Contains: HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

In case of hypersensitivity (asthma, chronic bronchitis) handling of the product is not recommended.
Even several hours after any overexposure, symptoms of respiratory tract disorders may occur.
Dust, vapors and aerosols are the main danger for the respiratory tract.

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

SECTION 3. Composition/information on ingredients ... / >>

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI		
INDEX	55 ≤ x < 75	**Acute Tox. 4 H332, STOT SE 3 H335, Skin Sens. 1B H317, Aquatic Chronic 3 H412, EUH204**
EC		**STA Inhalation vapours: 11 mg/l**
CAS *666723-27-9*		
HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER		
INDEX	20 ≤ x < 30	**Acute Tox. 4 H332, STOT SE 3 H335, Skin Sens. 1 H317**
EC *223-242-0*		**STA Inhalation vapours: 11 mg/l**
CAS *3779-63-3*		
REACH Reg. *01-2119949539-20-XXXX*		

The full wording of hazard (H) phrases is given in section 16 of the sheet.

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
Impurity of :

hexamethylene diisocyanate
Concentration [% by weight]: < 0.055
INDEX #: 615-011-00-1
REACH Registration Number: 01-2119457571-37-0000, 01-2119457571-37-0005, 01-2119457571-37-0006
CAS No: 822-06-0
Classification (1272/2008/CE): Acute Tox. 4 Oral H302 Acute Tox. 1 Inhalative H330 Skin Irrit. 2H315 Eye Irrit. 2 H319 Head Sens. 1 H334 Skin Sens. 1 H317 STOT SE 3 H335 (Respiratory system)
Specific limiting concentrations (GHS):
Rep. Sens. 1H334 >= 0.5%
Skin Sens. 1 H317 >= 0.5%
ATE (oral): 746 mg/kg
ATE (inhalation, vapour): 0.124 mg/l

3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate; isophorone di-isocyanate
Concentration [% by weight]: < 0.045
INDEX #: 615-008-00-5
EC No: 223-861-6
REACH registration number: 01-2119490408-31-0002, 01-2119490408-31-0012
CAS No: 4098-71-9
Classification (1272/2008/CE): Acute Tox. 1 Inhalative H330 Skin Irrit. 2 H315 Eye Irrit. 2 H319 Head Sens. 1 H334 Skin Sens. 1 H317 STOT SE 3 H335 (Respiratory system) Aquatic Chronic 2 H411
Specific limiting concentrations (GHS):
Skin Sens. 1 H317 >= 0.5%
Rep. Sens. 1H334 >= 0.5%
ATE (inhalation, dust/mist): 0.031 mg/l

SECTION 4. First aid measures

4.1. Description of first aid measures

General advice: Immediately remove soaked and soiled shoes and clothing, decontaminate and dispose of them.
If inhaled: Remove the injured person to fresh air, keep him warm and at rest; in case of respiratory ailments it is medical assistance is required.
In case of skin contact: In case of skin contact, possibly clean with a detergent based on polyethylene glycol, or wash with plenty of warm water and soap. Consult a physician if skin reactions occur.
In case of contact with the eyes: Wash the eyes for a long time (at least 10 min.) With lukewarm water keeping the eyelids open, then consult an ophthalmologist.
If swallowed: DO NOT induce vomiting. Wash / clean mouth with water. It is necessary to consult a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

SECTION 4. First aid measures ... / >>

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Contact emergency personnel immediately. Evacuate area. Keep away to avoid inhalation of vapours. Cleaning must only be performed by trained personnel. Keep unauthorized people away.
6.1.1. For non-emergency personnel: remove unaffected persons. Inform the competent authorities.
6.1.2. For the emergency team: they must wear full protective clothing, including respiratory protection. Use equipment suitable protections.

6.2. Environmental precautions

Do not allow contaminated extinguishing water to enter soil, groundwater or sewage superficial. Avoid dispersal of spilled material, runoff and contact with drains and sewers.

6.3. Methods and material for containment and cleaning up

Methods and material for containment and cleaning up: Absorb spills with sand, earth or any other suitable absorbent material. Leave to react for at least 30 minutes. Do not absorb with sawdust or other combustible materials. Transfer to open containers for further decontamination. Flush the spill area with water.

6.3.1. Appropriate cleaning procedures: The composition of liquid decontaminants is (percentages by weight or by volume):
Decontaminant 1:
- soda ash: 5 - 10%
- liquid detergent: 0.2 - 2%
- water: up to 100%.

Decontaminant 2:
- concentrated ammonia solution: 3 - 8%
- liquid detergent: 0.2 - 2%
- water: up to 100%.

Scavenger 1 reacts more slowly with diisocyanates but is more environmentally friendly than scavenger 2.
Decontaminant 2 contains ammonia. Ammonia has health risks.

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
Remove mechanically; cover the residues with damp absorbent material (eg sawdust, binders for chemical reactants based on hydrated calcium silicate, sand). After approx. 1 hour collect in a waste container. Do not close it (carbon dioxide develops). Keep in a humid place and leave several days outdoors, in a controlled place.
The spill area can be decontaminated using the following recommended decontamination solution:
Decontamination solution 1: 8-10% sodium carbonate and 2% liquid soap in water
Decontamination solution 2: liquid / Marseille soap (soap with potassium and with ~ 15% anionic surfactants): 20 ml; water: 700 ml; polyethylene glycol (PEG 400): 350 ml

SECTION 6. Accidental release measures ... / >>

Decontamination Medium 3: 30% commercial detergent (containing monoethanolamine 70% water

6.4. Reference to other sections

Refer to section 1 for emergency contact information and section 13 for waste disposal. Use appropriate personal protective equipment: see section 8.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

7.1.1. Protective measures:Ensure sufficient exchange and/or extraction in working rooms. In all workplaces where you can generate high concentrations of isocyanate aerosols and / or vapors (e.g. during pressure release, mold venting or during cleaning of mixing heads with an air blast), proper ventilation must be provided). Avoid exceeding the limits of occupational exposure. The efficiency of the ventilation system must be checked regularly due to the possibility of blockage. Atmospheric concentrations should be minimized and kept as low as reasonably practicable below the occupational exposure limit.
7.1.2. Advice for general occupational hygiene: Do not eat, drink, smoke or use tobacco in the workplace. Contact with skin and eyes and inhalation of vapors should be avoided under all circumstances. Keep the equipment clean. A key element in the sampling, handling and storage is the prevention of contact with water. Keep stocks ready scavengers.

7.2. Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in the original container protected from direct sunlight in a dry area, cool and well ventilated, away from incompatible materials, food and drink. Keep container tightly closed and sealed until use. THE Containers that have been opened should be carefully closed and kept upright to prevent leakage. Do not store in undesignated containers. Use adequate containment to avoid environmental contamination. Suitable containers: steel, stainless steel. Unsuitable containers: copper, copper alloys and galvanized surfaces.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Information not available

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.
Provide an emergency shower with face and eye wash station.
HAND PROTECTION
Protect hands with category III work gloves.
The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.
SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.
EYE PROTECTION
Wear airtight protective goggles (see standard EN ISO 16321).
RESPIRATORY PROTECTION
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. Use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387).
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.
ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.
Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 8. Exposure controls/personal protection ... / >>

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
Hand protection
Materials suitable for protective gloves; EN 374:
Nitrile rubber - NBR: thickness> = 0.35mm; onset time> = 480min.
Butyl rubber - IIR: thickness> = 0,5mm; onset time> = 480min.
Fluorinated rubber - FKM: thickness> = 0,4mm; onset time> = 480min.
Polyvinyl chloride - PVC: thickness> = 0.5mm; onset time> = 480min.
Recommendation: Properly dispose of contaminated gloves.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties		Value	Information
Appearance		liquid	
Colour		colourless	
Odour		mild	
Melting point / freezing point		not available	Reason for missing data:Date not available
Initial boiling point		193 °C	Method:DIN 53171
Flammability		not available	Reason for missing data:Date not available
Lower explosive limit		not available	Reason for missing data:Date not available
Upper explosive limit		not available	Reason for missing data:Date not available
Flash point	>	88 °C	Method:DIN EN ISO 2719
Auto-ignition temperature		440 °C	Method:DIN 51794
Decomposition temperature		not available	Reason for missing data:Date not available
pH		not available	Reason for missing data:substance/mixture reacts with water
Kinematic viscosity		not available	Reason for missing data:Date not available
Dynamic viscosity		428 mPAS	Method:DIN 53019 Temperature: 20 °C
Solubility		Insoluble, it reacts with the development of CO2	
Partition coefficient: n-octanol/water		not available	Reason for missing data:Date not available
Vapour pressure		3 hPa	Method:EG A4
Density and/or relative density		1,13 kg/l	Method:DIN EN ISO 2811
Relative vapour density		not available	Reason for missing data:Date not available
Particle characteristics		not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

VOC (Directive 2010/75/EU)	30,00 %	- 339,00	g/litre
VOC (volatile carbon)	8,39 %	- 94,82	g/litre

SECTION 10. Stability and reactivity

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
Exothermic reaction with amines and alcohols with water gradual development
CO2 increase pressure in closed containers; danger of bursting.

10.1. Reactivity

Reacts with water, acids, alcohols, amines, bases and oxidants. Ideal storage temperature 20 - 30°C to avoid the formation of dimers which lower the performance characteristics.

10.2. Chemical stability

TDI reacts with water to form mostly solid, insoluble polyureas. Under conditions typical of many types of environmental contact, for example with relatively little dispersion of the denser isocyanate, the interfacial reaction leads to the formation of a solid crust enclosing non or partially

SECTION 10. Stability and reactivity ... / >>

reacted. This crust limits the entry of water and the exit of amine, and thus slows down and modifies hydrolysis.

Stability in alcohol, benzene, diglycol monomethyl ether, ether, kerosene, acetone, carbon tetrachloride, chlorobenzene

10.3. Possibility of hazardous reactions

Reaction is slow with cold or hot water (<50°C), with hot water or steam the reaction is faster, producing carbon dioxide which causes an increase in pressure. Acids, alcohols, amines, bases and oxidants can cause overheating due to the heat of exothermic reaction with a high risk of fire.

10.4. Conditions to avoid

High temperature, humidity, strong light.

10.5. Incompatible materials

Water, acids, alcohols, amines, bases and oxidants.

10.6. Hazardous decomposition products

No dangerous decomposition products when stored and treated as prescribed / indicated.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.
It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation - vapours) of the mixture:	10,48 mg/l
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI

LD50 (Oral):	> 5000 mg/kg OECD TG 423
LC50 (Inhalation vapours):	1,5 mg/l/4h Ratto, femmina
STA (Inhalation vapours):	11 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER

LC50 (Inhalation vapours):	1,5 mg/l
STA (Inhalation vapours):	11 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

SECTION 11. Toxicological information ... / >>

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
ATEmix (inhalation): 2.72 mg / l, 4 h
Test atmosphere: dust / fog
Method: Method of calculation
Hydrophilic aliphatic polyisocyanate based on HDI
LC50 Rat, female: 0.390 mg / l, 4 hours
Test atmosphere: dust / fog
Method: OECD Test Guideline 403
The test atmosphere generated in the animal study is not representative of work environments, how the substance is placed on the market and how it is reasonable to expect it to be used. As a result of this, the test results cannot be directly applied to the objective of assessing the risks. Based on expert assessment and weight of evidence, a modified classification for acute inhalation toxicity is warranted.
Toxicological tests on a comparable product.
Conversion into point estimate of acute toxicity 1.5 mg / l
Test atmosphere: dust / fog
Method: Expert judgment
Assessment: Harmful if inhaled.

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
Hydrophilic aliphatic polyisocyanate based on HDI
Species: Rabbit
Result: It is not possible to distinguish an irritating action from a mechanical stress due to the removal of the sample.
Classification: No skin irritation
Method: OECD Test Guideline 404
Studies on a similar product.

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
Primary irritation of the mucous membranes
Hydrophilic aliphatic polyisocyanate based on HDI
Species: Rabbit
Result: slightly irritating
Classification: No eye irritation
Method: OECD Test Guideline 405
Studies on a similar product.

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
Hydrophilic aliphatic polyisocyanate based on HDI
Skin sensitization (LLNA (Local Lymph Node Assay)):
Species: Mouse
Result: positive
Classification: May cause sensitization by skin contact (sub-category 1B)
Method: OECD TG 429
Studies on a similar product.
Respiratory sensitization
Classification: No classification under EC Directives 2006/121 / EC or 1999/45 / EC as a respiratory sensitizer.
No pulmonary sensitization in animal testing.
No pulmonary sensitization potential was established in guinea pigs either after intradermal induction or after inhalation of hexamethylene diisocyanate-based polyisocyanate.

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
Genotoxicity in vitro
Hydrophilic aliphatic polyisocyanate based on HDI
Test type: Salmonella / microsome test (Ames-test)

SECTION 11. Toxicological information ... / >>

Result: No indications suggesting a mutagenic effect.
Method: OECD TG 471
Studies on a similar product.

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
CMR evaluation
Hydrophilic aliphatic polyisocyanate based on HDI
Carcinogenicity: Based on available data, the classification criteria are not met.
Mutagenicity: In vitro tests did not reveal mutagenic effects
Teratogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity / fertility: Based on available data, the classification criteria are not met.

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
Reproductive toxicity / fertility
Hydrophilic aliphatic polyisocyanate based on HDI
Available data show no evidence of reproductive toxicity

Adverse effects on development of the offspring

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
Reproductive toxicity / developmental toxicity / Teratogenicity
Hydrophilic aliphatic polyisocyanate based on HDI
Animal studies of structurally similar compounds did not reveal specific reproductive toxicities.

STOT - SINGLE EXPOSURE

May cause respiratory irritation

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
Specific target organ toxicity (single exposure)
Hydrophilic aliphatic polyisocyanate based on HDI
It can irritate the respiratory tract.

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
Hydrophilic aliphatic polyisocyanate based on HDI
NOAEL: 3.3 mg / m³ air
Method of application: Inhalation
Species: Rat, male / female
Dosage levels: 0 - 0.5 - 3.3 - 26.4 mg / m³
Duration of exposure: 90 d
Treatment frequency: 6 hours a day, 5 days a week
Test substance: as an aerosol
Method: OECD TG 413
No indications were found that would suggest damage to other organs other than those of respiration.
Toxicological tests on a comparable product.

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
Aspiration toxicity
Hydrophilic aliphatic polyisocyanate based on HDI
Based on available data, the classification criteria are not met.

SECTION 11. Toxicological information ... / >>

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
Hydrophilic aliphatic polyisocyanate based on HDI
Particular characteristics / effects: In the case of overexposure there is a danger, depending on the concentration, of irritation of the eyes, nose, throat and respiratory tract. Possible delayed appearance of disorders and development of a form of hypersensitivity (respiratory disorders, cough, asthma). Hypersensitive people may experience these effects even at low concentrations of isocyanate, including concentrations below the occupational exposure limit. In case of prolonged contact with the skin, irritating and dehydrating effects are possible.
In animal experiments and other tests it was found that skin contact with diisocyanates
it could play a role in isocyanate sensitization and pathway reactions
respiratory.

SECTION 12. Ecological information

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI

LC50 - for Fish	35,2 mg/l/96h Danio Rerio (pesce zebra)
EC50 - for Crustacea	> 100 mg/l/48h Saggio sulla specie: Daphnia magna
EC50 - for Algae / Aquatic Plants	> 72 mg/l/72h Testato su: alghe

12.2. Persistence and degradability

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
NOT rapidly degradable

12.3. Bioaccumulative potential

Information not available

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI
Reacts with water in correspondence of the contact surface with the development of CO_2
forming a solid reaction product, insoluble high melting point (polyurea). This reaction is accelerated by surfactants (eg. Liquid soap) and water-soluble solvents. According to the experience gained to date, polyurea is inert and non-degradable.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number or ID number

not applicable

14.2. UN proper shipping name

not applicable

14.3. Transport hazard class(es)

not applicable

14.4. Packing group

not applicable

14.5. Environmental hazards

not applicable

14.6. Special precautions for user

not applicable

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006
Product
Point 3

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors
not applicable

Substances in Candidate List (Art. 59 REACH)
On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)
None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:
None

Substances subject to the Rotterdam Convention:
None

Substances subject to the Stockholm Convention:
None

Healthcare controls
Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

SECTION 15. Regulatory information ... / >>

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 4	Acute toxicity, category 4
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Skin Sens. 1	Skin sensitization, category 1
Skin Sens. 1B	Skin sensitization, category 1B
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.
EUH204	Contains isocyanates. May produce an allergic reaction.

Use descriptor system:

AC	11	Wood articles
AC	11a	Wood articles: Large surface area articles
ERC	2	Formulation into mixture
LCS	F	Formulation or repacking
LCS	IS	Use at industrial sites
PC	9a	Coatings and paints, thinners, paint removers
PROC	5	Mixing or blending in batch processes
PROC	8a	Transfer of substance or mixture (charging and discharging) at non- dedicated facilities

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY
1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament

SECTION 16. Other information ... / >>

6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
23. Delegated Regulation (UE) 2023/707

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION
Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.
Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:
The following sections were modified:
01 / 04 / 06 / 07 / 10 / 16.