Safety Data Sheet according to Regulation (EC) 'No. 2020/878

SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifier

Product Name: 68XX/ISO-EUR

STONSEAL UT7 ISO

Revision Date: 21/01/2023

Supersedes Date: 12/04/2022

Version Number: 3

UFI Code: No Information

Nanoform: No

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

For use by appropriately trained applicators. Hardener for 2 component coatings - Professional use only. Please see Technical Data Sheet. Advised against: others than recommended

1.3 Details of the supplier of the safety data sheet

Importer: None

Manufacturer:

Stonhard Europe
9 Rue du Travail
1400 Nivelles
Belgium

Regulatory / Technical Information:
+32 67493710 Nivelles, Belgium

Datasheet Produced by: ehs-eu@stonhard.com

1.4 Emergency telephone number:

CHEMTREC +1 703 5273887 (Outside US)
PPC +1 412 6816669 (Outside US)
Centro Antiveleni di Milano Tel+39 02 66101029 (CAV - Grande Ospedale Metropolitano Niguarda - Milano)(24h/24h)
Emergenza ambientale +39 335-601 32 88 / +39 347-949 84 88 / +39 348-246 90 99

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Classification, Labeling & Packaging Regulation (EC) 1272/2008

HAZARD STATEMENTS

Skin Irritation, category 2	H315
Skin Sensitizer, category 1	H317
Eye Irritation, category 2	H319
Acute Toxicity, Inhalation, category 4	H332
Respiratory Sensitizer, category 1	H334
STOT, single exposure, category 3, RTI	H335
Carcinogenicity, category 2	H351
STOT, repeated exposure, category 2	H373

2.2 Label elements

Symbol(s) of Product

Signal Word

Danger

Named Chemicals on Label

4,4'-methylenediphenyl diisocyanate, Reaction mass of 4,4'- methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl) phenyl isocyanate, Diphenylmethane-diisocyanate, isomers and homologues

HAZARD STATEMENTS

Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Eye Irritation, category 2	H319	Causes serious eye irritation.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
Respiratory Sensitizer, category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
Carcinogenicity, category 2	H351	Suspected of causing cancer.
STOT, repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.

PRECAUTION PHRASES

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/ face protection.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position 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 so. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

Endocrine disrupting properties - Toxicity

Name According to EEC	CAS-No.
No Information	

Endocrine disrupting properties - Ecotoxicity

Name According to EEC	CAS-No.
No Information	

SECTION 3: Composition/Information On Ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Hazardous ingredients

Name According to EEC EINEC No. CAS-No. REACH Reg No.	%	Classifications	SCL Value: ATE Value: M-Factor:
Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl) phenyl isocyanate 905-806-4 01-2119457015-45	25 - <50	H315-317-319-330-334-335-351-373 Acute Tox. 2 Inhalation, Carc. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Irrit. 2, Skin Sens. 1, STOT RE 2, STOT SE 3 RTI	SCL Value: - ATE Value: - M-Factor: -
Diphenylmethane-diisocyanate, isomers and homologues 618-498-9 9016-87-9 No Information	25 - <50	H315-317-319-332-334-335-351-373 Acute Tox. 4 Inhalation, Carc. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Irrit. 2, Skin Sens. 1, STOT RE 2, STOT SE 3 RTI	SCL Value: - ATE Value: - M-Factor: -
4,4'-methylenediphenyl diisocyanate 202-966-0 101-68-8 01-2119457014-47	10 - <25	H315-317-319-332-334-335-351-373 Acute Tox. 4 Inhalation, Carc. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Irrit. 2, Skin Sens. 1, STOT RE 2, STOT SE 3 RTI	SCL Value: - ATE Value: - M-Factor: -

Additional Information: The text for CLP Hazard Statements shown above (if any) is given in Section 16.

SECTION 4: First-aid Measures

4.1 Description of First Aid Measures

GENERAL NOTES: When symptoms persist or in all cases of doubt seek medical advice.
AFTER INHALATION: Move to fresh air. Consult a physician after significant exposure.
AFTER SKIN CONTACT: Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
AFTER EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses.
AFTER INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Self protection of the first aider:

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Harmful by inhalation. May cause sensitization by inhalation. May cause sensitization by skin contact.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam

FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above.

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

Fire will produce dense black smoke containing hazardous combustion products (see section 10). Flash back possible over considerable distance. In the event of fire, wear self-contained breathing apparatus. High volume water jet. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Ensure adequate ventilation. Use personal protective equipment.

6.1.2 For emergency responders

No Information

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains.

6.3 Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

FURTHER INSTRUCTIONS: Please refer to EU disposal requirements or country specific disposal requirements for this material. See Section 8 and 13 for further information.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Do not breathe vapours or spray mist. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is being used.
Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: May react violently with water.
STORAGE CONDITIONS: Store in original container. Store in upright position only. Keep container tightly closed in a dry and well-ventilated place. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons. Contamination may result in dangerous pressure increases - closed containers may rupture. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Minimum storage temperature: +10°CMaximum storage temperature: +50°C

7.3 Specific end use(s)

The mixing and application to be in accordance with the technical data sheets.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits
(UK WELS)

Name	CAS-No.	LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3
Reaction mass of 4,4'- methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl) phenyl isocyanate					
Diphenylmethane-diisocyanate, isomers and homologues	9016-87-9				0.02
4,4'-methylenediphenyl diisocyanate	101-68-8			0.07	0.02

Name	CAS-No.	OEL Note
Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl) phenyl isocyanate		
Diphenylmethane-diisocyanate, isomers and homologues	9016-87-9	
4,4'-methylenediphenyl diisocyanate	101-68-8	

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation.

Chemical Name:

Reaction mass of 4,4'- methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl) phenyl isocyanate

EC No.: 905-806-4

CAS-No.:

DNELs - Derived no effect level

	Workers				Consumers			
Route of Exposure	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required					20 mg/kg bw/ day		
Inhalation	0.1 mg/l	0.1 mg/l	0.05 mg/m3	0.05 mg/m3	0.05 mg/m3	0.05 mg/m3	0.025 mg/m3	0.025 mg/m3
Dermal	28.7 mg/cm2				17.2 mg/cm2	25 mg/m3 bw/ day		

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	1 mg/l
Fresh water sediments	
Marine water	0.1 mg/l
Marine sediments	
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	1 mg/kg
Air	

Chemical Name:

4,4'-methylenediphenyl diisocyanate

EC No.: 202-966-0

CAS-No.: 101-68-8

DNELs - Derived no effect level

	Workers				Consumers			
Route of Exposure	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required					20 mg/kg bw/ day		
Inhalation	0.1 mg/L	0.1 mg/L	0.05 mg/m3	0.05 mg/m3	0.05 mg/m3	0.05 mg/m3	0.025 mg/m3	0.025 mg/m3
Dermal	28.7 mg/cm2	50 mg/Kg bw/ day			17.2 mg/cm2	25 mg/m3 bw/ day		

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	1 mg/L
Fresh water sediments	
Marine water	0.1 mg/L
Marine sediments	
Food chain	
Microorganisms in sewage treatment	1 mg/L
soil (agricultural)	1 mg/kg dw
Air	

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: Respirator with combination filter for vapour/particulate (EN 14387:2004+A1:2008): A1-P3. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respirator with a vapour filter (EN 14387:2004+A1:2008). Respirator with a vapor filter.

EYE PROTECTION: Tightly fitting safety goggles.

HAND PROTECTION: Impervious gloves. Nitrile rubber. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature). Long sleeved

clothing. Remove and wash contaminated clothing before re-use. Protective gloves complying with EN 374: Nitrile rubber. Butyl rubber.

OTHER PROTECTIVE EQUIPMENT: No Information

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Colour:	AMBER
Physical State	Liquid
Odor	slight
Odor threshold	n/a
pH	n/a
Melting point / freezing point (°C)	Not determined
Boiling point or initial boiling point and boiling range (°C)	N.D. - N.D.
Flash Point, (°C)	208
Evaporation rate	n/a
Flammability (solid, gas)	n/a
Llower and upper explosive limit	Not determined
Vapour Pressure	n/a
Relative vapour density	n/a
Density and/or relative density	1.23
Solubility in / Miscibility with water	insoluble
Partition coefficient: n-octanol/water	n/a
Auto-ignition temperature (°C)	>400
Decomposition temperature (°C)	n/a
Kinematic viscosity	16 - 38 mPas
Particle characteristics	Not applicable to liquids

9.2 Other information

VOC Content g/l: 0.00

Grams of VOC per liter of coating product as applied per ISO 11890-1 and/or ISO 11890-2.

Specific Gravity (g/cm3) 1.23

SECTION 10: Stability and Reactivity

10.1 Reactivity

Water reactive.

10.2 Chemical stability

Stable under recommended storage conditions. Container can be pressurized by carbon dioxide due to reaction with humid air and/or water. Humid air and/or water will produce carbon dioxide which will pressurize the container. Stable under normal conditions. Violent chemical reaction; water reactive

10.3 Possibility of hazardous reactions

No Information

10.4 Conditions to avoid

May react violently with water.

10.5 Incompatible materials
Amines and alcohols cause exothermic reactions.

10.6 Hazardous decomposition products
Carbon dioxide (CO_2), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

SECTION 11: Toxicological information

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

Acute Toxicity:

Oral LD50:	No information available.
Inhalation LC50:	No information available.
Dermal LD50:	No Information
Irritation:	No information available.
Corrosivity:	No information available.
Sensitization:	No information available.
Repeated dose toxicity:	No information available.
Carcinogenicity:	No information available.
Mutagenicity:	No information available.
Toxicity for reproduction:	No information available.
STOT-single exposure:	No information available.
STOT-repeated exposure:	No information available.
Aspiration hazard:	No information available.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Name According to EEC	Oral LD50	Dermal LD50	Vapor LC50	Gas LC50	Dust/Mist LC50
	Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl) phenyl isocyanate	>10000 (LD50, Oral, Rat M-F)	>9400 (LD50, Dermal, rabbit)	No information	No information	0.49 mg/l 4h
9016-87-9	Diphenylmethane-diisocyanate, isomers and homologues	>10000 mg/kg (oral, rat)	>9400 mg/kg (dermal, rabbit)	No information	No information	No information
101-68-8	4,4'-methylenediphenyl diisocyanate	>5000 mg/kg (oral, rat)	>9400 mg/kg (dermal, rabbit)	No information	No information	No information

Additional Information:
Allergic persons and workers with difficulty in breathing should not be employed in powder application. Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effect, such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates. Respiration of solvent vapour may cause dizziness. May cause allergic respiratory reaction. May cause allergic skin reaction. Isocyanates may cause acute irritation and/or sensitisation of the respiratory system leading to tightness of the chest, wheeziness and an asthmatic condition.

11.2 Information on other hazards

Endocrine disrupting properties - Toxicity

Name According to EEC	CAS-No.
No Information	

SECTION 12: Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):	No information
IC50 72hr (Algae):	No information
LC50 96hr (fish):	No information

12.2 Persistence and degradability: No information

12.3 Bioaccumulative potential: No information

12.4 Mobility in soil: No information

12.5 Results of PBT and vPvB assessment: The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Ecotoxicity

Name According to EEC	CAS-No.
No Information	

12.7 Other adverse effects: No information

CAS-No.	Name According to EEC	EC50 48hr	IC50 72hr	LC50 96hr
	Reaction mass of 4,4'- methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl) phenyl isocyanate	No information	No information	>1000 (CL50, 96h , fish)
9016-87-9	Diphenylmethane-diisocyanate, isomers and homologues	No information	1640 mg/L	>1000 mg/L
101-68-8	4,4'-methylenediphenyl diisocyanate	>100 mg/L	No information	No information

SECTION 13: Disposal Considerations

13.1 WASTE TREATMENT METHODS: Dispose of as hazardous waste in compliance with local and national regulations. If recycling is not practicable, dispose of in compliance with local regulations. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Empty containers should be taken to an approved waste handling site for recycling or disposal.

European Waste Code: 080111*
Packaging Waste Code: 150110

SECTION 14: Transport Information

		ADR/RID	ADN	IMDG	IATA
14.1	UN-number or ID number	No Information	No Information	No Information	No Information
14.2	UN proper shipping name	Not regulated for transport according to U.S. DOT, ADR/RID, IMDG, and IATA regulations.	Not regulated for transport according to U.S. DOT, ADR/RID, IMDG, and IATA regulations.	Not regulated for transport according to U.S. DOT, ADR/RID, IMDG, and IATA regulations.	Not regulated for transport according to U.S. DOT, ADR/RID, IMDG, and IATA regulations.
14.3	Transport Hazard Class(es)	No Information	No Information	No Information	No Information
14.4	Packing Group	No Information	No Information	No Information	No Information
14.5	Enviromental Hazards	No Information	No Information	No Information	No Information

14.6 Special precautions for user Not applicable

EmS-No.: Not applicable

14.7 Maritime transport in bulk according to IMO intruments Not applicable

SECTION 15: Regulatory Information

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

National Regulations:

Denmark Product Registration Number: Not available

Danish MAL Code: Not available

Danish MAL Code - Mixture: Not available

Sweden Product Registration Number: Not available

Norway Product Registration Number: Not available

Germany WGK Class: 3

Directive 2004/42/CE : 2 g/l

Covered by Directive 2012/18/EC (Seveso III): Not applicable

Restrictions to product or to substances according to Annex XVII, Regulation (CE) 1907/2006: Not applicable

Annex XIV, Regulation (CE) 1907/2006 - Authorisation List:

CAS-No.	Name According to EEC
Not Applicable	

SVHC - Substances of very high concern (Candidate List - Art. 59 REACH):

CAS-No.	Name According to EEC
Not Applicable	

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other Information

Text for CLP Hazard Statements shown in Section 3 describing each ingredient:

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
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.

Reasons for revision

Substance and/or Product Properties Changed in Section(s):
01 - Identification
02 - Hazard Identification
03 - Composition/Information On Ingredients
08 - Exposure Controls/Personal Protection
09 - Physical and Chemical Properties
11 - Toxicological Information
13 - Disposal Information
14 - Transportation Information
Revision Statement(s) Changed

This is a new Safety Data Sheet (SDS). This Safety Data Sheet (SDS) has been revised to meet the new EU CLP requirements. There have been both formatting and content changes based on the CLP classification (if applicable), please review each section of the SDS for specific changes.

List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

- The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark.
- Joint Research Centre in Ispra, Italy.
- Regulation (EC) 1272/2008 with subsequent amendments.
- Regulation (EC) 1272/2006 with subsequent amendments.
- Commission Regulation (EU) 2020/878
- EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"
- Safety Data Sheet from raw material supplier
- The classification of the product is based on the calculation methods set out in Annex I and Annex II of the CLP Reg. 1272/2008 on the exact composition of the formula

Acronym & Abbreviation Key:

CLP	Classification, Labeling & Packaging Regulation
EC	European Commission
EU	European Union
US	United States
CAS	Chemical Abstract Service
EINECS	European Inventory of Existing Chemical Substances
REACH	Registration, Evaluation, Authorization of Chemicals Regulation
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
LTEL	Long term exposure limit
STEL	Short term exposure limit
OEL	Occupational exposure limit
ppm	Parts per million
mg/m3	Milligrams per cubic meter
TLV	Threshold Limit Value
ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety & Health Administration
PEL	Permissible Exposure Limits
VOC	Volatile organic compounds
g/l	Grams per liter
mg/kg	Milligrams per kilogram
N/A	Not applicable
LD50	Lethal dose at 50%
LC50	Lethal concentration at 50%
EC50	Half maximal effective concentration
IC50	Half maximal inhibitory concentration
PBT	Persistent bioaccumulative toxic chemical
vPvB	Very persistent and very bioaccumulative
EEC	European Economic Community
ADR	International Transport of Dangerous Goods by Road
RID	International Transport of Dangerous Goods by Rail
UN	United Nations
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association
MARPOL	International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978
IBC	International Bulk Container
RTI	Respiratory Tract Irritation
NE	Narcotic Effects
IMO	International Maritime Organization
Note P:	The classification as a carcinogen or mutagen need not apply; the substance contains less than 0,1 % w/w benzene
Note 10:	The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter ≤ 10 µm.

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.