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: STONSEAL CA7 ISOCYANATE

60494ISO-EUR

Revision Date: 31/07/2024

Supersedes Date: 01/02/2023

Version Number: 4

UFI Code: No Information

Contain nanoform: No

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

For use by appropriately trained applicators. Component of multicomponent 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)

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 Sensitizer, category 1	H317
Acute Toxicity, Inhalation, category 4	H332
STOT, single exposure, category 3, RTI	H335

2.2 Label elements

Symbol(s) of Product

Signal Word

Warning

Named Chemicals on Label

Hexamethylene diisocyanate, hexamethylene diisocyanate, oligomers

HAZARD STATEMENTS

Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.

PRECAUTION PHRASES

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/ face protection.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+364	Take off contaminated clothing and wash it before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container to waste treatment/disposal facility in accordance with local, state, and federal regulations.

ADDITIONAL INFORMATION

As from 24 August 2023 adequate training is required before industrial or professional use.

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:	
hexamethylene diisocyanate, oligomers 500-060-2 28182-81-2 01-2119488934-20	75-100	H317-332-335 Acute Tox. 4 Inhalation, Skin Sens. 1, STOT SE 3 RTI	**SCL Value:** **ATE Value:** **M-Factor: (acute)** **M-Factor: (chronic)**	- - - -
Hexamethylene diisocyanate 212-485-8 822-06-0 01-2119457571-37 615-011-00-1	0.1 - <1.0	H302-315-317-319-330-334-335 Acute Tox. 1 Inhalation, Acute Tox. 4 Oral, Eye Irrit. 2, Resp. Sens. 1, Skin Irrit. 2, Skin Sens. 1, STOT SE 3 RTI	**SCL Value:** **ATE Value:** **M-Factor: (acute)** **M-Factor: (chronic)**	Resp. Sens. 1; H334: C ≥ 0.5 Skin Sens. 1; H317: C - - -

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: Gently wipe or rinse the inside of the mouth with water. 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. Irritating to eyes and respiratory system.

4.3 Indication of any immediate medical attention and special treatment needed

Immediate medical attention is required. 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

Heating or fire can release toxic gas.

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. ABC powder. 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. Water reactive

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

Wear personal protective equipment. Do not breathe vapours or spray mist.
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: Direct sources of heat. Keep from any possible contact with water.
STORAGE CONDITIONS: Store in original container. Keep locked up or in an area accessible only to qualified or authorised persons. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

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
hexamethylene diisocyanate, oligomers	28182-81-2				
Hexamethylene diisocyanate	822-06-0			0.07	0.02

Name	CAS-No.	OEL Note
hexamethylene diisocyanate, oligomers	28182-81-2	
Hexamethylene diisocyanate	822-06-0	

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:
hexamethylene diisocyanate, oligomers

EC No.: 500-060-2
CAS-No.: 28182-81-2

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							
Inhalation								
Dermal								

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.127 mg/l
Fresh water sediments	266700 mg/kg (dry)
Marine water	0.0127 mg/l
Marine sediments	26670 mg/kg (dry)
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	53182 mg/kg (dry)
Air	

Chemical Name:
Hexamethylene diisocyanate

EC No.: 212-485-8

CAS-No.: 822-06-0

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							
Inhalation	70 µg/m³ irritation (respiratory tract)	70 µg/m³ irritation (respiratory tract)	35 µg/m³ irritation (respiratory tract)	35 µg/m³ irritation (respiratory tract)				
Dermal								

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	77.4 µg/L
Fresh water sediments	13.34 µg/kg sediment dw
Marine water	7.74 µg/L
Marine sediments	1.344 µg/kg sediment dw
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	2.6 µg/kg soil dw
Air	

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: The mixing and application process for this material has been assessed to determine levels of worker exposure to airborne vapors. The findings demonstrate that workers are not exposed to concentrations of airborne vapors which exceed the set regulatory exposure limits. Ensure adequate ventilation in enclosed or confined spaces. No personal respiratory protective equipment normally required.

EYE PROTECTION: Ensure that eyewash stations and safety showers are close to the workstation location. Safety goggles. Tightly fitting safety goggles.

HAND PROTECTION: Impervious gloves. Protective gloves complying with EN 374. Long sleeved clothing. Remove and wash contaminated clothing before re-use.

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:	colorless
Physical State	Liquid
Odor	odorless
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/a - n/a
Flash Point, (°C)	158
Evaporation rate	n/a
Flammability (solid, gas)	n/a

Llower and upper explosive limit	Not determined - Not determined
Vapour Pressure	n/a
Relative vapour density	n/a
Density and/or relative density	1.17
Solubility in / Miscibility with water	insoluble
Partition coefficient: n-octanol/water	n/a
Auto-ignition temperature (°C)	445
Decomposition temperature (°C)	n/a
Kinematic viscosity	1200 mPas @23°C
Particle characteristics	Not applicable to liquids

9.2 Other information

VOC Content g/l: 90

Grams of VOC per liter of coating product as applied (mixture of Part A and Part B) per ASTM D2369 Method E.

Specific Gravity (g/cm3)	1.17

SECTION 10: Stability and Reactivity

10.1 Reactivity
No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Hazardous polymerisation may occur.

10.4 Conditions to avoid
Direct sources of heat. Keep from any possible contact with water.

10.5 Incompatible materials
Reacts violently in contact with acids, amines, driers, polymerisation accelerators and easily oxidized materials. Strong oxidizing agents. Contact with water or moist air liberates irritating gas. Amines and alcohols cause exothermic reactions.

10.6 Hazardous decomposition products
Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), 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
28182-81-2	hexamethylene diisocyanate, oligomers	>5000 mg/kg (oral, rat)	>2000 mg/kg (dermal, rat, M-F)	18500 mg/m3/1H inhalation, rat	No information	
822-06-0	Hexamethylene diisocyanate	710 mg/kg (oral-rat)	No information	0.124 mg/L (inhalation, 4h, rat)	23 ppm / 4h	No information

Additional Information:
Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates. May cause allergic skin reaction.

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
28182-81-2	hexamethylene diisocyanate, oligomers	>100 mg/L (Daphnia magna)	>100 mg/L (ErC50, 72h, Scenedesmus subspicatus)	>100 mg/L (Brachydanio rerio)
822-06-0	Hexamethylene diisocyanate	No information	77.4 mg/L (ErC50, static, desmodesmus subspicatus)	8.8 mg/L (Brachydanio rerio)

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. 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:	5-5
Danish MAL Code - Mixture:	4-5
Sweden Product Registration Number:	Not available
Norway Product Registration Number:	Not available
Germany WGK Class:	Not available
Directive 2004/42/CE:	90 g/l as mixed
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:

H302	Harmful if swallowed.

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.

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
15 - Regulatory Information
Revision Statement(s) Changed

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 declared in sec. 2.2 is based on the calculation methods set out in Annex I and Annex II of the CLP Reg. 1272/2008 on the 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.