

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 7333/ISO-EUR Revision Date: 28/03/2025

Product Name: STONSEAL CF7 ISO Supersedes Date: 13/02/2023

Version Number: 2

UFI Code: No Information

Contain nanoform:

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)

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, Hydrophilic aliphatic polyisocyanate (HDI based)

HAZARD STATEMENTS

Other EU extensions Skin Sensitizer, category 1 Acute Toxicity, Inhalation, category 4 STOT, single exposure, category 3, RTI PRECAUTION PHRASES	EUH204 H317 H332 H335	Contains isocyanates. May produce an allergic reaction. May cause an allergic skin reaction. Harmful if inhaled. May cause respiratory irritation.
	P233	Keep container tightly closed.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/ face protection.
	P302+352	IF ON SKIN: Wash with plenty of soap and water.
	P304+340	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.
	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 and container in accordance with all local, regional, national and international 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:

No Information

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.	<u>%</u>	<u>Classifications</u>	,	SCL Value: ATE Value: M-Factor:
hexamethylene diisocyanate, oligomers 500-060-2	50 - <75	H317-332-335	SCL Value:	-
28182-81-2 01-2119488934-20		Acute Tox. 4 Inhalation, Skin Sens. 1, STOT SE 3 RTI	ATE Value:	-
			M-Factor: (acute)	-
			M-Factor: (chronic)	-
Hydrophilic aliphatic polyisocyanate (HDI based)	10 - <25	H317-332-335-412	SCL Value:	-
No Information		Acute Tox. 4 Inhalation, Aquatic Chronic 3, Skin Sens. 1B, STOT SE 3 RTI	ATE Value:	-
			M-Factor: (acute)	-
			M-Factor: (chronic)	-

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

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. If skin irritation persists, call a physician.

AFTER EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. If eye irritation persists, consult a specialist.

AFTER INGESTION: Gently wipe or rinse the inside of the mouth with water. Give small amounts of water to drink. 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

May cause sensitization by inhalation. May cause sensitization by skin contact. Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes and respiratory system.

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

Heating or fire can release toxic gas.

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Water spray ABC powder. Dry powder Alcohol-resistant foam Carbon dioxide (CO2). High volume water jet. Hazardous decomposition products formed under fire conditions.

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

No Information

6.3 Methods and material for containment and cleaning up

No special environmental precautions required. 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). After cleaning, flush away traces with water.

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. Avoid prolonged contact with eyes, skin and clothing.

When using, do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing.

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: Keep tightly closed in a dry and cool place.

7.3 Specific end use(s)

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

822-06-0

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Hexamethylene diisocyanate

Ingredients with Occupational Exposure Limits (UK WELS)

<u>Name</u>	CAS-No.		LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3
hexamethylene diisocyanate, oligomers	28182-81-2					
Hydrophilic aliphatic polyisocyanate (HDI based)	666723-27-9					
Hexamethylene diisocyanate	822-06-0				0.07	0.02
<u>Name</u>	CAS-No.	OEL Note				
hexamethylene diisocyanate, oligomers	28182-81-2					
Hydrophilic aliphatic polyisocyanate (HDI based)	666723-27-9					

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

DNELs - Derived no effect level

	Workers					Con	sumers	
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	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.: CAS-No.: 212-485-8 822-06-0

DNELs - Derived no effect level

		Wo	rkers			Con	sumers	
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	systemic
Oral	Not required							
Inhalation	70 μg/m³	70 μg/m³	35 μg/m³	35 μg/m³				
	irritation	irritation	irritation	irritation				
	(respiratory	(respiratory	(respiratory	(respiratory tract)				
	tract)	tract)	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: In case of insufficient ventilation wear suitable respiratory equipment. Ensure adequate ventilation in enclosed or confined spaces. No personal respiratory protective equipment normally required. Respirator with filter for organic vapor.

EYE PROTECTION: Safety glasses.

HAND PROTECTION: Gloves

Body Protection: 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.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Colour: pale yellow

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/a - n/a

Flash Point, (°C) 110

Evaporation rate n/a

Flammability (solid, gas) n/a

Llower and upper explosive limit Not determined - Not determined

 $\begin{array}{lll} \mbox{Vapour Pressure} & \mbox{n/a} \\ \mbox{Relative vapour density} & \mbox{n/a} \\ \mbox{Density and/or relative density} & 1.1 \end{array}$

Solubility in / Miscibility with water insoluble

Partition coefficient: n-octanol/water n/a

Auto-ignition temperature (°C) >250

Decomposition temperature (°C) n/a

Kinematic viscosity Not determined

Particle characteristics Not applicable to liquids

9.2 Other information

VOC Content g/l:

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) 1,10

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 does not 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):

IC50 72hr (Algae):

No information

No information

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 The product do

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)
666723-27-9	Hydrophilic aliphatic polyisocyanate (HDI based)	>100 mg/l (Dir. 67/548/ CEE, Allegato V, C.2)	72 mg/l (OECD TG 201)	35.2 mg/l (Danio Rerio, Linee guida 203 OECD)
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. Waste codes should be assigned by the user based on the application for which the product was used. 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

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

0-5 (2023) Danish MAL Code:

Danish MAL Code - Mixture: 0-5 (2023)

Sweden Product Registration Number: Not available

Norway Product Registration Number: Not available

Germany WGK Class: Not available

Directive 2004/42/CE: 30 g/l as mixed

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

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.
H412	Harmful to aquatic life with long lasting effects.

Reasons for revision

Composition Information Changed

Substance and/or Product Properties Changed in Section(s):

- 01 Identification
- 02 Hazard Identification
- 03 Composition/Information On Ingredients
- 08 Exposure Controls/Personal Protection
- ${\tt 09}$ 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

 $\begin{array}{ll} {\rm g/l} & {\rm Grams~per~liter} \\ {\rm mg/kg} & {\rm Milligrams~per~kilogram} \end{array}$

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 \leq 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.