Safety Data Sheet Prepared in Accordance with HCS 29 C.F.R. 1910.1200



1. Identification of the Substance/Mixture and the Company/Undertaking

1.1 Product Identifier 7332/ISO-BAGS Revision Date: 12/23/2022

Product Name: Stonseal CF7 ISO Supersedes Date: 08/29/2020

1.2 Relevant identified uses of the

substance or mixture and uses

advised against

Hardener for 2 components coatings - Industrial use. Advised against: others than

recommended

1.3 Details of the supplier of the safety data sheet

Manufacturer: Stonhard, Division of StonCor Group, Inc.

1000 East Park Avenue Maple Shade, NJ 08052

+1 856 7797500 (US)

Datasheet Produced by: ehs@stonhard.com

1.4 Emergency telephone number: CHEMTREC 1-800-424-9300 (Inside US)

CHEMTREC +1 703 5273887 (Outside US)

Giftinformasjonen: +47 22 59 13 00

2. Hazard Identification

2.1 Classification of the substance or mixture

Acute Toxicity, Inhalation, category 1 STOT, single exposure, category 3, RTI Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

Hexamethylene diisocyanate, hexamethylene diisocyanate, oligomers, Hydrophilic Aliphatic Polyisocyanate based on HDI

HAZARD STATEMENTS

Skin Sensitizer, category 1 Acute Toxicity, Inhalation, category 1 Acute Toxicity, Inhalation, category 4 STOT, single exposure, category 3, RTI PRECAUTION PHRASES	H317 H330-1 H332 H335	May cause an allergic skin reaction. Fatal if inhaled. Harmful if inhaled. May cause respiratory irritation.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/ face protection.
	P284	Wear respiratory protection.
	P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	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.
	P333+313	If skin irritation or rash occurs: Get medical advice/attention.
	P403+233	Store in a well-ventilated place. Keep container tightly closed.

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

No information

3. Composition/Information On Ingredients

3.2 Mixtures

Hazardous ingredients

Name According to EEC hexamethylene diisocyanate, oligomers	EINEC No. 931-274-8	CAS-No. 28182-81-2	<u>%</u> 75-100	<u>Classifications</u> H317-330-335	Acute Tox. 1 Inhalation, Skin Sens. 1, STOT SE 3 RTI
Hydrophilic Aliphatic Polyisocyanate based on HDI		666723-27-9	10 - <25	H330	Acute Tox. 1 Inhalation

Hexamethylene

diisocyanate

212-485-8

822-06-0 0.1 - < 1.0

H302-311-315-317-3 19-330-334-335 Acute Tox. 1 Inhalation, Acute Tox. 3 Dermal, Acute Tox. 4 Oral, Eye Irrit. 2, Resp. Sens. 1, Skin Irrit. 2, Skin Sens. 1, STOT SE 3 RTI

 CAS-No.
 M-Factors

 28182-81-2
 0

666723-27-9 0 822-06-0 0

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

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, 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.

5. Fire-fighting 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. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Water reactive.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains. Keep the container open.

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

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

7. Handling and Storage

7.1 Precautions for safe handling

INSTRUCTIONS 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.

PROTECTION AND HYGIENE MEASURES: 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: Keep from any possible contact with water.

STORAGE CONDITIONS: Store in original container. Keep container tightly closed in a dry and well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons.

7.3 Specific end use(s)

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

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (US)

<u>Name</u>	CAS-No.	ACGIH TWA	ACGIH STEL	ACGIH Ceiling
hexamethylene diisocyanate, oligome	ers 28182-81-2			
Hydrophilic Aliphatic Polyisocyanate based on HDI	666723-27-9			
Hexamethylene diisocyanate	822-06-0	0.005 PPM		
<u>Name</u>	<u>CAS-No.</u>	OSHA PEL	OSHA STEL	
hexamethylene diisocyanate, oligome	ers 28182-81-2			
Hydrophilic Aliphatic Polyisocyanate based on HDI	666723-27-9			

FURTHER INFORMATION: Refer to the regulatory exposure limits for the workforce enforced in each country.

822-06-0

8.2 Exposure controls

Personal Protection

Hexamethylene diisocyanate

RESPIRATORY PROTECTION: When mixing or applying this product, the installation area should be well ventilated, either naturally or via mechanical ventilation to prevent vapor accumulation. In case of insufficient ventilation or work in confined spaces, workers should wear a NIOSH or CE approved half face air purifying respirator (APR) equipped with organic vapor cartridges.

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

Safety goggles.

HAND PROTECTION: Impervious gloves. 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

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Clear / Pale Yellow

Physical State LIQUID
Odor Slight

Odor threshold

PH

Non-aqueous

Melting point / freezing point (°C)

Not determined

Boiling point/range (°C)

N.D. - N.D.

Flash Point, (°F / °C) >201F / >94C

Evaporation rate Not determined

Flammability (solid, gas) Not determined

Upper/lower flammability or explosive

imits

Vapour Pressure 5.2 X10-9 mmHg @ 20C

Vapour densityHeavier than airRelative densityNot determined

Solubility in / Miscibility with water Insoluble, reacts slowly

Partition coefficient: n-octanol/water Not determined

Auto-ignition temperature (°C) 445°C

Decomposition temperature (°C) 181°C

Viscosity 800 mPa.s @ 20 DC

Explosive properties Not applicable

Oxidising properties

Not applicable

N/A - N/A

9.2 Other information

VOC Content g/l: 50

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) 1.153

10. Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Container can be pressurized by carbon dioxide due to reaction with humid air and/or water. Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

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. Contact with water or moist air liberates irritating gas.

10.6 Hazardous decomposition products

Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: No information

Inhalation LC50: No information available.

Irritation: May cause skin and eye irritation.

Corrosivity: Not corrosive.

Sensitization: May cause skin sensitization.

Repeated dose toxicity: No information available.

Carcinogenicity: Not carcinogenic.

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.	Chemical Name	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, rabbit	0.39 mg/l, 4 h, rat		
666723-27-9	Hydrophilic Aliphatic Polyisocyanate based on HDI	>5,000 mg/kg, Rat, Oral		0.158 mg/l, 4 hr, Rat	0.000	0.158 mg/l
822-06-0	Hexamethylene diisocyanate	746 mg/kg, rat	959 mg/kg, rat	0.124 mg/l, 4 h,	0.000	0.000

Additional Information:

Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates.

12. Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):

IC50 72hr (Algae):

No information

No information

No information

12.2 Persistence and degradability: Not readily degradable.

12.3 Bioaccumulative potential: No information

12.4 Mobility in soil: No information

12.5 Results of PBT and vPvB No information

assessment:

12.6 Other adverse effects: No information

CAS-No. **Chemical Name** EC50 48hr IC50 72hr LC50 96hr 199 mg/l 28182-81-2 hexamethylene diisocyanate, oligomers 127 mg/l >100 mg/l Hydrophilic Aliphatic Polyisocyanate based on 666723-27-9 No information No information No information 822-06-0 No information No information Hexamethylene diisocyanate 82.8 mg/l

13. Disposal Considerations

13.1 WASTE TREATMENT METHODS: 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.

14. Transport Information

14.1 UN number N/A

14.2 UN proper shipping nameNot regulated for transport

Technical name Not applicable

14.3 Transport hazard class(es) N/A

Subsidiary shipping hazard

Not applicable

14.4 Packing group

Not applicable

14.5 Environmental hazards

Not applicable

Not applicable

Not applicable

EmS-No.: N/A

14.7 Transport in bulk according to Annex II of

MARPOL 73/78 and the IBC code

Not applicable

15. Regulatory Information

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

U.S. Federal Regulations: As follows -

CERCLA - Sara Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Acute Toxicity (any route of exposure), Respiratory or Skin Sensitization, Specific target organ toxicity (single or repeated exposure)

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the U.S. Superfund Amendment and Reauthorization Act (SARA) of 1986 and 40 CFR part 372:

<u>Chemical Name</u> <u>CAS-No.</u> <u>%</u>

Hexamethylene diisocyanate 822-06-0 0.25

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

U.S. Clean Air Act:

EPA Coating Category: Industrial Maintenance Coating

EPA VOC Content Limit (g/l): 450
Product VOC Content (g/l) 50
Thinning Recommendations: None

Application Recommendations: For professional use only.

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

No NJ Right-To-Know components exist in this product.

Pennsylvania Right-To-Know

The following non-hazardous ingredients are present in the product at greater than 3%.

No PA Right-To-Know components exist in this product.

California Proposition 65:

^{*} As per the federal EPA definition for coating categories in 40 CFR 59.401.

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

No Proposition 65 Chemicals exist in this product.

International Regulations: As follows -

* Canadian DSL:

All chemical ingredients included on inventory or exempt.

15.2 Chemical Safety Assessment:

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

16. Other Information

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

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
11000	Fatal if intratal

H330 Fatal 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
- 05 Fire-fighting Measures
- 08 Exposure Controls/Personal Protection
- 09 Physical and Chemical Properties
- 11 Toxicological Information
- 14 Transportation 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 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 \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.