

**Safety Data Sheet according to Regulation
(EC) 'No. 2020/878****STONHARD****SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking**

- 1.1 Product Identifier** 23301/A **Revision Date:** 16/04/2025
- Product Name:** Stonres STR UNDERCOAT Part A **Supersedes Date:** 11/04/2024
- UFI Code:** No Information
- Contain nanoform:** No
- 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**
- Importer:** Stonhard Europe SRL
9, Rue du Travail - 1400 Nivelles, Belgium
- Manufacturer:** Stonhard, Division Of StonCor Group, Inc.
1000 East Park Avenue
Maple Shade, NJ 08052

+1 856 7797500(US)
- Regulatory / Technical Information:**
+32 67493710 Nivelles, Belgium
- Datasheet Produced by:** ehs@stonhard.com
- 1.4 Emergency telephone number:** +1 703-741-5970 - North America
+1 800-424-9300
+55 11 4349 1359 - South America
+52 55 8526 4930 - Central America
+44 20 3885 0382 - Middle East, Eastern Europe, Western Europe, and Africa
+65 3163 8374 - Asia, South Asia, And Oceania

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
Carcinogenicity, category 2	H351
Hazardous to the aquatic environment, Chronic, category 3	H412

2.2 Label elements

Symbol(s) of Product



Signal Word

Warning

Named Chemicals on Label

titanium dioxide, tetraethyl n, n'-(methylenedicyclohexane-4,1,-diyl) bis-dl-aspartate, Proprietary modified amine

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.
Carcinogenicity, category 2	H351	Suspected of causing cancer.
Hazardous to the aquatic environment, Chronic, category 3	H412	Harmful to aquatic life with long lasting effects.

PRECAUTION PHRASES

P201	Obtain special instructions before use.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P308+313	IF exposed or concerned: Get medical advice/attention.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P337+313	If eye irritation persists: Get medical advice/attention.
P362+364	Take off contaminated clothing and wash it before reuse.

P501

Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3 Other hazards**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**

<u>Name According to EEC</u> <u>EINEC No.</u> <u>CAS-No.</u> <u>REACH Reg No.</u>	<u>%</u>	<u>Classifications</u>	SCL Value:	
			ATE Value:	
			M-Factor:	
tetraethyl n, n'-(methylenedicyclohexane-4,1,-diyl) bis-dl-aspartate 429-270-1 136210-30-5 No Information	25 - <50	H317-412 Aquatic Chronic 3, Skin Sens. 1	SCL Value:	-
			ATE Value:	-
			M-Factor: (acute)	-
			M-Factor: (chronic)	-

titanium dioxide 236-675-5 13463-67-7 01-2119489379-17	10 - <25	H351 Carc. 2	SCL Value:	-
			ATE Value:	-
			M-Factor: (acute)	-
			M-Factor: (chronic)	-
Proprietary modified amine 18275200000-5 102 No Information	10 - <25	H315-317-319 Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1	SCL Value:	-
			ATE Value:	-
			M-Factor: (acute)	-
			M-Factor: (chronic)	-
dipropylene glycol dimethyl ether 601-045-4 111109-77-4 No Information	2.5 - <10	H315-319 Eye Irrit. 2, Skin Irrit. 2	SCL Value:	-
			ATE Value:	-
			M-Factor: (acute)	-
			M-Factor: (chronic)	-

dipropylene glycol dibenzoate 27138-31-4 No Information	2.5 - <10	H412 Aquatic Chronic 3	SCL Value: - ATE Value: - M-Factor: (acute) - M-Factor: (chronic) -
silicon dioxide (amorphous) 231-545-4 7631-86-9 01-2119379499-16	2.5 - <10		SCL Value: - ATE Value: - M-Factor: (acute) - M-Factor: (chronic) -
calcium oxide 1305-78-8 No Information	1.0 - <2.5	H315-318-335 Eye Dam. 1, Skin Irrit. 2, STOT SE 3 RTI	SCL Value: - ATE Value: - M-Factor: (acute) - M-Factor: (chronic) -

aluminum oxide 1344-28-1 01-2119529248-35	1.0 - <2.5		SCL Value:	-
			ATE Value:	-
			M-Factor: (acute)	-
			M-Factor: (chronic)	-
2-Butenedioic acid (2E)-, 1,4-diethyl ester 210-819-7 623-91-6 No Information	1.0 - <2.5	H302-371 Acute Tox. 4 Oral, STOT SE 2	SCL Value:	-
			ATE Value:	-
			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. 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 if swallowed. Irritating to skin. 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

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. Contains epoxy constituents. See information supplied by the manufacturer.

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. May cause long-term adverse effects in the aquatic environment.

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. 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: No Information

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)

No specific advice for end use available.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (UK WELS)

<u>Name</u>	<u>CAS-No.</u>	<u>LTEL ppm</u>	<u>STEL ppm</u>	<u>STEL mg/m3</u>	<u>LTEL mg/m3</u>
tetraethyl n, n'-(methylenedicyclohexane-4,1,-diyl) bis-dl-aspartate	136210-30-5				
titanium dioxide	13463-67-7				4, 10
Proprietary modified amine	18275200000-5102				
dipropylene glycol dimethyl ether	111109-77-4				
dipropylene glycol dibenzoate	27138-31-4				
silicon dioxide (amorphous)	7631-86-9				2.4 mg/m3
calcium oxide	1305-78-8			4	2 1
aluminum oxide	1344-28-1				10 4 10 4
2-Butenedioic acid (2E)-, 1,4-diethyl ester	623-91-6				

<u>Name</u>	<u>CAS-No.</u>	<u>OEL Note</u>
tetraethyl n, n'-(methylenedicyclohexane-4,1,-diyl) bis-dl-aspartate	136210-30-5	
titanium dioxide	13463-67-7	
Proprietary modified amine	18275200000-5102	
dipropylene glycol dimethyl ether	111109-77-4	
dipropylene glycol dibenzoate	27138-31-4	
silicon dioxide (amorphous)	7631-86-9	
calcium oxide	1305-78-8	
aluminum oxide	1344-28-1	
2-Butenedioic acid (2E)-, 1,4-diethyl ester	623-91-6	

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:

titanium dioxide

EC No.:

236-675-5

CAS-No.:

13463-67-7

DNELs - Derived no effect level

Route of Exposure	Workers				Consumers			
	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							700 mg/kg/d
Inhalation			10					
Dermal								

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.127
Fresh water sediments	1000
Marine water	1
Marine sediments	100
Food chain	1667
Microorganisms in sewage treatment	100 mg/l
soil (agricultural)	100
Air	

8.2 Exposure controls**Personal Protection****RESPIRATORY PROTECTION:** No personal respiratory protective equipment normally required.**EYE PROTECTION:** Ensure that eyewash stations and safety showers are close to the workstation location. Safety glasses.**HAND PROTECTION:** Impervious 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. Ensure adequate ventilation, especially in confined areas.**SECTION 9: Physical and Chemical Properties****9.1 Information on basic physical and chemical properties**

Colour:	PIGMENTED
Physical State	LIQUID
Odor	SLIGHT
Odor threshold	Not determined
pH	N/A
Melting point / freezing point (°C)	Not determined
Boiling point or initial boiling point and boiling range (°C)	168 - N.D.
Flash Point, (°C)	94
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined

Lower and upper explosive limit	-
Vapour Pressure	N/A
Relative vapour density	N/A
Density and/or relative density	Not determined
Solubility in / Miscibility with water	NEGLIGIBLE
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Not determined
Decomposition temperature (°C)	Not determined
Kinematic viscosity	400 cps
Particle characteristics	Not applicable to liquids

9.2 Other information

VOC Content g/l:	60
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)	1.295

SECTION 10: Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

No decomposition if stored and applied as directed. Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

No Information

10.5 Incompatible materials

Strong oxidizing agents. Acids and bases. Amines.

10.6 Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapours. Alcohols. Exothermic reaction. Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

SECTION 11: Toxicological information

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

Acute Toxicity:

Oral LD50:	No Information
Inhalation LC50:	No Information
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:

<u>CAS-No.</u>	<u>Name According to EEC</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>	<u>Gas LC50</u>	<u>Dust/Mist LC50</u>
136210-30-5	tetraethyl n, n'- (methylenedicyclohexane-4,1, -diyl) bis-dl-aspartate	>2000 mg/kg (rat)	>2000 mg/kg (rat)	>4224 mg/m3, 4 hr. (rat)	0.000	0.000
13463-67-7	titanium dioxide	10000 mg/kg, oral (rat)			0.000	6,82 mg/l (rat) 4h
27138-31-4	dipropylene glycol dibenzoate	>2000 mg/kg Rat Dermal		>200 mg/L Rat 4 h	0.000	0.000
7631-86-9	silicon dioxide (amorphous)	3,160 mg/kg, rat		58.8 mg/l, 4hr, rat	0.000	0.000
623-91-6	2-Butenedioic acid (2E)-, 1,4- diethyl ester	1780 mg/kg (rat)			0.000	0.000

Additional Information:

Constituents of this product may include crystalline silica which, if inhalable, may cause silicosis, a form or progressive pulmonary fibrosis. Inhalable crystalline silica is listed by IARC as a group 1 carcinogen (lung) based on sufficient evidence in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a known human carcinogen. This classification is relevant when exposed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. Constituents may also include abestiform or non-asbestiform tremolite or other silicates as impurities, and above dei minimus exposure to these impurities in inhalable form may be carcinogenic or cause other serious lung problems. This product may contain Titanium Dioxide, which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals. This classification is relevant when exposed to titanium dioxide in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities.

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: No Information

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Ecotoxicity

Name According to EEC	CAS-No.
No Information	

12.7 Other adverse effects: No information

<u>CAS-No.</u>	<u>Name According to EEC</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
136210-30-5	tetraethyl n, n'-(methylenedicyclohexane-4,1,-diyl) bis-dl-aspartate	88.6 mg/l	113 mg/l	66 mg/l (zebra fish)
13463-67-7	titanium dioxide	>100 mg/l (EC50, 48h, Daphnia magna OECD202)ation	No information	>1000 mg/l
18275200000-5102	Proprietary modified amine	No information	No information	
111109-77-4	dipropylene glycol dimethyl ether	No information	No information	
27138-31-4	dipropylene glycol dibenzoate	No information	No information	3.7 mg/l
7631-86-9	silicon dioxide (amorphous)	No information	No information	
1305-78-8	calcium oxide	No information	No information	
1344-28-1	aluminum oxide	No information	No information	
623-91-6	2-Butenedioic acid (2E)-, 1,4-diethyl ester	No information	No information	

SECTION 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.

European Waste Code: 080111
Packaging Waste Code: 150110

SECTION 14: Transport Information

	ADR/RID	ADN	IMDG	IATA
14.1 UN-number or ID number	N/A	N/A	N/A	N/A
14.2 UN proper shipping name	NOT REGULATED,N/A	NOT REGULATED,N/A	NOT REGULATED,N/A	NOT REGULATED,N/A
14.3 Transport Hazard Class(es)	NONE,NONE	NONE,NONE	NONE,NONE	NONE,NONE
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:	N/A
Danish MAL Code:	00-5 (1993)
Danish MAL Code - Mixture:	Not available
Sweden Product Registration Number:	Not available
Norway Product Registration Number:	Not available
Germany WGK Class:	Not available

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.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H371	May cause damage to organs.
H412	Harmful to aquatic life with long lasting effects.

Reasons for revision

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

08 - Exposure Controls/Personal Protection

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/m ³	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
LD ₅₀	Lethal dose at 50%
LC ₅₀	Lethal concentration at 50%
EC ₅₀	Half maximal effective concentration
IC ₅₀	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.

