Safety Data Sheet

Prepared in Accordance with HCS 29 C.F.R. 1910.1200



01/06/2023

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

1.1 Product Identifier 64400-0100/A Revision Date: 03/13/2024

Product Name: Stonres Flex Groutcoat Clear

Amine

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

Supersedes Date:

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: +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

2. Hazard Identification

2.1 Classification of the substance or mixture

Hazardous to the aquatic environment, Chronic, category 3 Reproductive Toxicity, category 1A Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product





Signal Word

Danger

Named Chemicals on Label

tetraethyl n, n'-(methylenedicyclohexane-4,1,-diyl) bis-dl-aspartate

HAZARD STATEMENTS

Skin Sensitizer, category 1 Reproductive Toxicity, category 1A	H317 H360-1A	May cause an allergic skin reaction. May damage fertility or the unborn child.
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.
	P202	Do not handle until all safety precautions have been read and understood.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	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.
	P308+P313	IF exposed or concerned: Get medical advice/attention
	P333+313	If skin irritation or rash occurs: Get medical advice/attention.

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 tetraethyl n, n'- (methylenedicyclohexan e-4,1,-diyl) bis-dl- aspartate	EINEC No. 429-270-1	<u>CAS-No.</u> 136210-30-5	<u>%</u> 50 - <75	Classifications H317-412	Aquatic Chronic 3, Skin Sens. 1
2-Butenedioic acid (2E)-, 1,4-diethyl ester	210-819-7	623-91-6	2.5 - <10	H302-371	Acute Tox. 4 Oral, STOT SE 2
Bis(4-(1,2-bis (ethoxycarbonyl) ethylamino)-3- methylcyclohexyl) methane	412-060-9	136210-32-7	1.0 - <2.5		

1,3-benzenediol,4-[4,6-bis(2,4	604-910-4	153519-44-9	1.0 - <2.5	H410	Aquatic Chronic 1
N-methyl-2-pyrrolidone	212-828-1	872-50-4	0.1 - <1.0	H315-319-331-335-3 60	Acute Tox. 3 Inhalation, Eye Irrit. 2, Repr. 1A, Skin Irrit. 2, STOT SE 3 RTI

<u>CAS-No.</u> <u>M-Factors</u>

136210-30-5 623-91-6 136210-32-7 153519-44-9 872-50-4

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. If eye irritation persists, consult a specialist.

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 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.

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

No Information

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. 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.

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.

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.

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: 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.

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
tetraethyl n, n'- (methylenedicyclohexane-4,1,-diyl) bi: dl-aspartate	136210-30-5 s-			
2-Butenedioic acid (2E)-, 1,4-diethyl ester	623-91-6			
Bis(4-(1,2-bis(ethoxycarbonyl) ethylamino)-3-methylcyclohexyl)meth	136210-32-7 ane			
1,3-benzenediol,4-[4,6-bis(2,4	153519-44-9			
N-methyl-2-pyrrolidone	872-50-4			

Na	<u>ame</u>	CAS-No.	OSHA PEL	OSHA STEL
(m	raethyl n, n'- ethylenedicyclohexane-4,1,-diyl) bis- aspartate	136210-30-5		
2-l es	Butenedioic acid (2E)-, 1,4-diethyl ter	623-91-6		
	s(4-(1,2-bis(ethoxycarbonyl) nylamino)-3-methylcyclohexyl)methane	136210-32-7		
1,3	3-benzenediol,4-[4,6-bis(2,4	153519-44-9		

N-methyl-2-pyrrolidone

872-50-4

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

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: Respirator with a vapor filter.

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

 $\textbf{HAND PROTECTION:} \ Impervious \ gloves. \ Long \ sleeved \ clothing. \ Remove \ and \ wash \ contaminated \ clothing \ before \ re-use.$

OTHER PROTECTIVE EQUIPMENT: No Information

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

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Clear / Yellow resin

Physical State Liquid
Odor Mild

Odor threshold Not determined

pH Non-aqueous

Melting point / freezing point (°C)

Not determined

Boiling point/range (°C) 120 - N.D.

Flash Point, (°F / °C) >201F / >94C

Evaporation rate Not determined

Flammability (solid, gas) Not determined

Upper/lower flammability or explosive N/A - N/A

limits

Vapour PressureNot determinedVapour densityNot determinedRelative densityNot 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

Viscosity 28770 cps
Explosive properties Not determined

Oxidising properties

Not determined

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) 1.058

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.

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 (NOx), dense black smoke.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: No information

Inhalation LC50: 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.	Chemical Name	Oral LD50	Dermal LD50	Vapor LC50	Gas LC50	Dust/Mist LC50
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

623-91-6 2-Butenedioic acid (2E)-, 1,4-

2-Buterleuloic acid (2E)-, 1,4- 1780 mg/kg (rat) 0.000 0.000 0.000

872-50-4 N-methyl-2-pyrrolidone 3900 mg/kg, 3.1 mg/L / 4hr, oral, rat rat, inh 0.000 >5.1 mg/l (rat)

Additional Information:

No Information

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 No information

assessment:

12.6 Other adverse effects: No information

CAS-No.	<u>Chemical Name</u>	EC50 48hr	IC50 72hr	LC50 96hr
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)
623-91-6	2-Butenedioic acid (2E)-, 1,4-diethyl ester	No information	No information	
136210-32-7	Bis(4-(1,2-bis(ethoxycarbonyl)ethylamino)-3-methylcyclohexyl)methane	No information	No information	
153519-44-9	1,3-benzenediol,4-[4,6-bis(2,4	No information	No information	
872-50-4	N-methyl-2-pyrrolidone	No information	No information	

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 name Not regulatedTechnical name Not applicable

14.3 Transport hazard class(es) N/A

Subsidiary shipping hazard Not applicable

14.4 Packing group N/A

14.5 Environmental hazards Not applicable14.6 Special precautions for user 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:

Reproductive toxicity, Respiratory or Skin Sensitization

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:

No SARA 313 substances exist in this product above de minimis concentrations.

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) 90
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.

Chemical NameCAS-No.bis (2-ethylhexyl) terephthalate6422-86-2Secondary Amine800963-52925

Pennsylvania Right-To-Know

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

Chemical NameCAS-No.bis (2-ethylhexyl) terephthalate6422-86-2Secondary Amine800963-52925

California Proposition 65:

WARNING: Reproductive Toxicant -- www.P65Warnings.ca.gov

No Proposition 65 Carcinogens 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. H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

^{*} 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.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

H360 May damage fertility or the unborn child.

H371 May cause damage to organs.

H410 Very toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.

Reasons for revision

Composition Information Changed

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

02 - Hazard Identification

03 - Composition/Information On Ingredients

09 - Physical and Chemical Properties

15 - Regulatory Information Revision Statement(s) Changed

This Safety Data Sheet (SDS) has been revised to meet updated national hazard communication standards which have adopted the provisions of the UN GHS system. There have been both formatting and content changes based on the GHS classification (if applicable), Please review each section of the SDS for specific changes. 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 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.