Safety Data Sheet

prepared to UN GHS Revision 3



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

1.1 Product Identifier 60XXAO Revision Date: 08/04/2015

Product Name: STONKOTE GS4 PART A Supercedes Date: 06/16/2015

Hardener for 2 components coatings - Industrial use.

1.2 Relevant identified uses of the substance or mixture and uses

advised against

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: Darnell, Benjamin - ehs@ stoncor.com

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

CHEMTREC +1 703 5273887 (Outside US)

2 Hazard Identification

2.1 Classification of the substance or mixture

Hazardous to the aquatic environment, Acute, category 1 Hazardous to the aquatic environment, Chronic, category 1 Reproductive Toxicity, category 2 Skin Corrosion, category 1 Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

2-piperazin-1-ylethylamine, 3-aminomethyl-3,5,5-trimethylcyclohexylamine, 4-nonylphenol, branched

HAZARD STATEMENTS

Hazardous to the aquatic environment, Acute, category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment, Chronic, category 1	H410	Very toxic to aquatic life with long lasting effects.
Reproductive Toxicity, category 2	H361	Suspected of damaging fertility or the unborn child.
Skin Corrosion, category 1	H314-1	Causes severe skin burns and eye damage.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
PRECAUTION PHRASES		
	P260	Do not breathe 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.
	P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P308+P313	IF exposed or concerned: Get medical advice/attention
	P333+313	If skin irritation or rash occurs: Get medical advice/attention.
	P391	Collect spillage.

23 Other hazards

Notapplicable

Results of PBT and vPvB assessment:

No information

3. Composition/Information On Ingredients

3.2 Mixtures

Hazardous Ingredients

CAS-No.	<u>Chemical Name</u>	<u>%</u>
84852-15-3	4-nonylphenol, branched	25-50
9046-10-0	polyoxypropylenediamine	25-50
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	10-25
140-31-8	2-piperazin-1-ylethylamine	2.5-10

CAS-No.	GHS Symbols	GHS Hazard Statements	M-Factors
84852-15-3	GHS05-GHS07-GHS08-GHS09	H302-314-361-400-410	0
9046-10-0	GHS05-GHS09	H314-411	Ο
2855-13-2	GHS05-GHS07	H302-314-317-412	Ο
140-31-8	GHS05-GHS06	H311-314-317-412	Ο

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: 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

Causes severe burns. Harmful 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

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.

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 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

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: Direct sources of heat

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)

Name%OSHAPELACGIH TLV4-nonylphenol, branched25-5025-50polyoxypropylenediamine25-503-aminomethyl-3,5,5-trimethylcyclohexylamine10-252-piperazin-1-ylethylamine2.5-10

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

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: No personal respiratory protective equipment normally required.

EYE PROTECTION: Safety glasses.

HAND PROTECTION: Impervious glovesTake note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). 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.

Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Not determined

Physical State

Odor Amine

Odor threshold Not determined

pH Alkaline

Melting point / freezing point (°C)Not determined

Boiling point/range (°C) 220 - N.D.

Flash Point, (°F /°C) >240F />116C

Evaporation rate Not determined

Flammability (solid, gas) Not determined

Upper/lower flammability or explosive N.D. - N.D.

limits

Vapour Pressure

< 1.0 mmHg

Not determined

Vapour density

Relative density

Not determined

Solubility in / Miscibility with water

Slight (<20.0%)

Partition coefficient: n-octanol/water

Not determined

Auto-ignition temperature (°C)

Not determined

Viscosity 200 CPS

Explosive properties N/A Oxidising properties N/A

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) 0.947

10. Stability and Reactivity

Decomposition temperature (°C)

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

10.5 Incompatible materials

Strong oxidizing agents.

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:

Inhalation LC50:

Irritation: No information available.

Corrosivity: Corrosive to eyes and skin.

Sensitization: No information available.

Repeated dose toxicity: No information available.

Carcinogenicity: No information available.

Mutagenicity: No information available.

Toxicity for reproduction: 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.	<u>Chemical Name</u>	Oral LD50	Dermal LD50	Vapor LC50
84852-15-3	4-nonylphenol, branched	1300 mg/kg oral		
9046-10-0	polyoxypropylenediamine	2855 mg/kg, rat	2980 mg/kg, rabbit	
2855-13-2	3-aminomethyl-3,5,5- trimethylcyclohexylamine	1030 mg/kg, rat	>2000 mg/kg, rat	
140-31-8	2-piperazin-1-ylethylamine	2140 mg/kg, oral, rat	866 mg/kg rabbit	

Additional Information:

This product is classified as a "Reproductive Toxicity - Category 2" due to containing a substance classified as a reproductive toxin via ingestion /oral exposure route only. Normal product application methods by trained crew members would not present a risk of oral exposure or ingestion.

12 Ecological Information

121 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>	<u>EC5048hr</u>	<u>IC5072hr</u>	<u>LC5096hr</u>
84852-15-3	4-nonylphenol, branched	.035 mg/L	.0563 mg/L	.1383 mg/l
9046-10-0	polyoxypropylenediamine	No information	No information	
2855-13-2	3-aminomethyl-3,5,5- trimethylcyclohexylamine	No information	>50 mg/l	110 mg/l
140-31-8	2-piperazin-1-ylethylamine	58 mg/l	>1000 mg/L	2190 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	UN3267
14.2	UN proper shipping name	Corrosive Liquid, Basic, Organic, n.o.s.
	Technical name	4-Nonylpheno, branched, Polyoxypropylenediamine
14.3	Transport hazard class(es)	8
	Subsidiary shipping hazard	
14.4	Packing group	III
14.5	Environmental hazards	
14.6	Special precautions for user	Notapplicable
	EmS-No.:	F-A, S-B
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Notapplicable

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 Health Hazard

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 components exist in this product

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 Coatings

EPA VOC Content Limit (g/l): 450
Product VOC Content (g/l) 5
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:

Warning: The following ingredients present in the product are known to the State of California to cause cancer:

No Proposition 65 Carcinogens exist in this product

Warning: The following ingredients present in the product are known to the State of California to cause birth defects, or other reproductive hazards.

No Proposition 65 Reproductive Toxins 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.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H361	Suspected of damaging fertility or the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

^{*} 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.

Reasons for revision

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 ESIS (The European Chemical Substances Information System), provided by the European Commission Joint Research Centre in Ispra, Italy

Annex VI of the EU Council Directive 67/548/EEC

Council Directive 67/548/EEC - Annex I or EU Council Directive 1999/45/EC

European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation)

EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"

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

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.