

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

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

- 1.1 Product Identifier** 69020 **Revision Date:** 10/26/2018
Product Name: STONKOTE HB4 AMINE **Supersedes Date:** 06/25/2018
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Hardener for 2 components coatings - Industrial use.
- 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)

2. Hazard Identification**2.1 Classification of the substance or mixture**

Acute Toxicity, Inhalation, category 4
Acute Toxicity, Oral, category 4
Hazardous to the aquatic environment, Chronic, category 2
Carcinogenicity, category 1B
Germ Cell Mutagenicity, category 1B
Skin Corrosion, category 1B
Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

Benzyl alcohol, 2,6-dimethylheptan-4-one, 2-piperazin-1-ylethylamine, 3-Aminomethyl-3,5,5-trimethylcyclohexylamine, (R)-p-mentha-1,8-diene, Solvent naphtha (petroleum), light arom.

HAZARD STATEMENTS

Acute Toxicity, Oral, category 4	H302	Harmful if swallowed.
Skin Corrosion, category 1B	H314-1B	Causes severe skin burns and eye damage.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
Germ Cell Mutagenicity, category 1B	H340-1B	May cause genetic defects.
Carcinogenicity, category 1B	H350-1B	May cause cancer.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic 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.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.
P305+P351+P338	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.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

No information

3. Composition/Information On Ingredients

3.2 Mixtures

Hazardous Ingredients

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>%</u>
100-51-6	Benzyl alcohol	25 - <50
2855-13-2	3-Aminomethyl-3,5,5-trimethylcyclohexylamine	25 - <50
68609-08-5	cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with bisphenol a diglycidyl ether homopolymer	10 - <25
5989-27-5	(R)-p-mentha-1,8-diene	2.5 - <10
140-31-8	2-piperazin-1-ylethylamine	2.5 - <10
64742-95-6	Solvent naphtha (petroleum), light arom.	0.1 - <1.0
108-83-8	2,6-dimethylheptan-4-one	<0.1
68956-56-9	HYDROCARBONS, TERPENE PROCESSING BY-PRODUCTS	<0.1
97-64-3	Ethyl lactate	<0.1

<u>CAS-No.</u>	<u>GHS Symbols</u>	<u>GHS Hazard Statements</u>	<u>M-Factors</u>
100-51-6	GHS07	H302-312-319-332	0
2855-13-2	GHS05-GHS07	H302-314-317-412	0
68609-08-5	GHS09	H411	0
5989-27-5	GHS02-GHS07-GHS09	H226-315-317-400-410	0
140-31-8	GHS05-GHS06	H311-314-317-412	0
64742-95-6	GHS07-GHS08	H304-335-336-340-350	0
108-83-8	GHS02-GHS06	H226-331-335-336	0
68956-56-9			0
97-64-3	GHS02-GHS05-GHS07	H226-318-335	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: 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)

<u>Name</u>	<u>CAS-No.</u>	<u>ACGIH TWA</u>	<u>ACGIH STEL</u>	<u>ACGIH Ceiling</u>
Benzyl alcohol	100-51-6			
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2			
cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with bisphenol a diglycidyl ether homopolymer	68609-08-5			
(R)-p-mentha-1,8-diene	5989-27-5			
2-piperazin-1-ylethylamine	140-31-8			
Solvent naphtha (petroleum), light arom.	64742-95-6	300.0 PPM		
2,6-dimethylheptan-4-one	108-83-8	25 PPM		
HYDROCARBONS, TERPENE PROCESSING BY-PRODUCTS	68956-56-9	300.0 PPM		

Ethyl lactate 97-64-3

<u>Name</u>	<u>CAS-No.</u>	<u>OSHA PEL</u>	<u>OSHA STEL</u>
Benzyl alcohol	100-51-6		
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2		
cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with bisphenol a diglycidyl ether homopolymer	68609-08-5		
(R)-p-mentha-1,8-diene	5989-27-5		
2-piperazin-1-ylethylamine	140-31-8		
Solvent naphtha (petroleum), light arom.	64742-95-6	500.0 PPM	
2,6-dimethylheptan-4-one	108-83-8	150 MGM3, 25 PPM	
HYDROCARBONS, TERPENE PROCESSING BY-PRODUCTS	68956-56-9	500.0 PPM	
Ethyl lactate	97-64-3		

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. Respirator with filter for organic vapor.

EYE PROTECTION: Safety glasses.

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 / Yellow
Physical State	LIQUID
Odor	Amine
Odor threshold	Not determined
pH	Alkaline
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	80 - N.D.
Flash Point, (°F / °C)	>240F / >116C
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	N.D. - N.D.
Vapour Pressure	< 1.0 mmHg

Vapour density	Heavier than air
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
Decomposition temperature (°C)	Not determined
Viscosity	200 CPS
Explosive properties	Not applicable
Oxidising properties	Not applicable

9.2 Other information

VOC Content g/l:	5
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)	0.987

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 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 (NO_x), 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: 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:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>	<u>Gas LC50</u>	<u>Dust/Mist LC50</u>
100-51-6	Benzyl alcohol	1620 mg/kg, rat	2000 mg/kg, rabbit	>4178 mg/m ³ , rat	0.000	0.000
2855-13-2	3-Aminomethyl-3,5,5-trimethylcyclohexylamine	1030 mg/kg, rat	>2000 mg/kg, rat		0.000	5.01 mg/l 4 hr
140-31-8	2-piperazin-1-ylethylamine	2108 mg/kg, oral, rat	866 mg/kg rabbit		0.000	0.000
64742-95-6	Solvent naphtha (petroleum), light arom.	4700 mg/kg, oral, rat	>3480 mg/kg, rabbit	3670 ppm/4 hours, rat, inhalation	0.000	0.000
108-83-8	2,6-dimethylheptan-4-one	3200 mg/kg, oral, rat	16,000 mg/kg, rabbit	1979 ppm / 6 hrs, rat, inhalation	2000 ppm, rat	0.000
68956-56-9	HYDROCARBONS, TERPENE PROCESSING BY-PRODUCTS		>3480 mg/kg, rabbit		0.000	0.000
97-64-3	Ethyl lactate	>5000 mg/kg		4900 ppm	0.000	0.000

Additional Information:

No Information

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 Other adverse effects:	No information

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
100-51-6	Benzyl alcohol	230 mg/l	700 mg/l	460 mg/l
2855-13-2	3-Aminomethyl-3,5,5-trimethylcyclohexylamine	23 mg/l	>50 mg/l	110 mg/l
68609-08-5	cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with bisphenol a diglycidyl ether homopolymer	No information	No information	
5989-27-5	(R)-p-mentha-1,8-diene	No information	No information	
140-31-8	2-piperazin-1-ylethylamine	58 mg/l	>1000 mg/L	2190 mg/l
64742-95-6	Solvent naphtha (petroleum), light arom.	>1 - 10 mg/l	>1 - 10 mg/l	>10-100 mg/l
108-83-8	2,6-dimethylheptan-4-one	No information	No information	
68956-56-9	HYDROCARBONS, TERPENE PROCESSING BY-PRODUCTS	>1 - 10 mg/l	>1 - 10 mg/l	>10-100 mg/l
97-64-3	Ethyl lactate	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	UN2735
14.2 UN proper shipping name	Amines, Liquid, Corrosive, n.o.s.
Technical name	Isophoronediamine, Modified aliphatic amines
14.3 Transport hazard class(es)	8
Subsidiary shipping hazard	Not applicable
14.4 Packing group	III
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	Not applicable
EmS-No.:	F-A, S-B
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:

Carcinogenicity, Acute Toxicity (any route of exposure), Skin Corrosion or Irritation, Respiratory or Skin Sensitization, Germ cell mutagenicity

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>
Cumene	98-82-8
Benzene	71-43-2
Toluene	108-88-3

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)	28
Thinning Recommendations:	The coating is to be applied without thinning.
Application Recommendations:	For professional use only.

* 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.

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: Cancer - www.P65Warnings.ca.gov

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

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:

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
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.

Reasons for revision

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

- 08 - Exposure Controls/Personal Protection
- 09 - Physical and Chemical Properties

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;
 European Union Commission Regulation No. 1907/2006 on REACH as amended within Commission Regulation (EU) 2015/830;
 European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) and subsequent technical progress adaptations (ATP);
 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/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
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

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.