Safety Data Sheet according to Regulation (EC) 'No. 2015/830

SECTION 1: Identification of the Substance/Mixture and the Company/Undertaking

1.1 Product Identifier

Product Name: 01736GAEN / STONCLAD GS - A

Revision Date: 18/02/2022
Supersedes Date: 23/06/2020
Version Number: 9

UFI Code: No Information

1.2 Relevant identified uses of the substance or mixture and uses advised against

For use by appropriately trained applicators. Hardener for 2 component coatings - Professional use only. Please see Technical Data Sheet.

1.3 Details of the supplier of the safety data sheet

Importer: None

Manufacturer:

Stonhard Europe
9 Rue du Travail
1400 Nivelles
Belgium

Regulatory / Technical Information:
+32 67493710 Nivelles, Belgium

Datasheet Produced by: ehs-eu@stonhard.com

1.4 Emergency telephone number:

CHEMTREC +1 703 5273887 (Outside US)
PPC +1 412 6816669 (Outside US)
Centro Antiveleni di Milano Tel+39 02 66101029 (CAV - Grande Ospedale Metropolitano Niguarda - Milano)(24h/24h)
Emergenza ambientale +39 335-601 32 88 / +39 347-949 84 88 / +39 348-246 90 99

SECTION 2: Hazard Identification

2.1 Classification of the substance or mixture

Classification according to Classification, Labeling & Packaging Regulation (EC) 1272/2008

HAZARD STATEMENTS

Acute Toxicity, Oral, category 4	H302
Acute Toxicity, Dermal, category 4	H312
Skin Corrosion, category 1B	H314-1B
Skin Sensitizer, category 1	H317
Acute Toxicity, Inhalation, category 2	H330-2
STOT, single exposure, category 3, RTI	H335
Reproductive_ToxicityFD_category_2	H361fd

STOT, repeated exposure, category 1	H372
Hazardous to the aquatic environment, Chronic, category 2	H411

2.2 Label elements

Symbol(s) of Product

Signal Word

Danger

Named Chemicals on Label

4-tert-Butylphenol, diethylenetriamine, Triethylenetetramine, 2-piperazin-1-ylethylamine, 4,4' - isopropylidenediphenol oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with dietheylenetriamine

HAZARD STATEMENTS

Acute Toxicity, Oral, category 4	H302	Harmful if swallowed.
Acute Toxicity, Dermal, category 4	H312	Harmful in contact with skin.
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 2	H330-2	Fatal if inhaled.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
Reproductive_ToxicityFD_category_2	H361fd	Suspected of damaging fertility or the unborn child.
STOT, repeated exposure, category 1	H372	Causes damage to organs through prolonged or repeated exposure.
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.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/ face protection.
P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
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+P313	IF exposed or concerned: Get medical advice/attention
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container to waste treatment/disposal facility in accordance with local, state, and federal regulations.

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

No information

SECTION 3: Composition/Information On Ingredients

3.2 Mixtures

Hazardous ingredients

Name According to EEC	EINEC No.	CAS-No.	%	Classifications	
2-piperazin-1-ylethylamine	205-411-0	140-31-8	25 - <50	H302-311-314-317-361 FD-372-412	
4-tert-Butylphenol	202-679-0	98-54-4	10 - <25	H315-318-361F-410	
diethylenetriamine	203-865-4	111-40-0	10 - <25	H302-312-314-317-330-335	
Triethylenetetramine	203-950-6	112-24-3	10 - <25	H302-312-314-317-412	Acute Tox. 4 Dermal, Acute Tox. 4 Oral, Aquatic Chronic 3, Skin Corr. 1B, Skin Sens. 1
4,4' -isopropylidenediphenol oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with diethylenetriamine	500-072-8	31326-29-1	2.5 - <10	H302-312-332	

CAS-No.	M-Factors	REACH Reg No.
140-31-8		01-2119471486-30
98-54-4	1	01-2119489419-21
111-40-0		01-2119473793-27
112-24-3		
31326-29-1		

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.
AFTER EYE CONTACT: 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

No Information

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: 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.

SECTION 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

FURTHER INSTRUCTIONS: Please refer to EU disposal requirements or country specific disposal requirements for this material. See Section 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. Do not breathe vapours or spray mist.
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)

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

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (IR)

Name	CAS-No.	LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3
2-piperazin-1-ylethylamine	140-31-8				
4-tert-Butylphenol	98-54-4				
diethylenetriamine	111-40-0	1			4
Triethylenetetramine	112-24-3				

4,4' - isopropylidenediphenol oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with diethylenetriamine	31326-29-1

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.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: The mixing and application process for this material has been assessed to determine levels of worker exposure to airborne vapors. The findings demonstrate that workers are not exposed to concentrations of airborne vapors which exceed the set regulatory exposure limits. Ensure adequate ventilation in enclosed or confined spaces. No personal respiratory protective equipment normally required.

EYE PROTECTION: Tightly fitting safety goggles.

HAND PROTECTION: Impervious gloves. Protective gloves complying with EN 374. 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.

Chemical Name:

2-piperazin-1-ylethylamine

EC No.: 205-411-0

CAS-No.: 140-31-8

DNELs - Derived no effect level

	Workers				Consumers			
Route of Exposure	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				0.02 mg/kg bw/day	1.5 mg/kg bw/ day		0.3 mg/kg bw/ day
Inhalation		21.4 mg/m3		3.6 mg/m3		5.3 mg/m3		0.9 mg/m3
Dermal		20 mg/kg bw/ day	0.006 mg/cm2	3.3 mg/kg bw/ day		10 mg/kg bw/ day	0.003 mg/cm2	1.7 mg/cm2

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.058 mg/l
Fresh water sediments	215 mg/kg dwt
Marine water	0.0058 mg/l
Marine sediments	21.5 mg/kg bwt
Food chain	
Microorganisms in sewage treatment	82.2 mg/l
soil (agricultural)	42.9 mg/kg dwt
Air	

Chemical Name:
4-tert-Butylphenol

EC No.: 202-679-0

CAS-No.: 98-54-4

DNELs - Derived no effect level

	Workers				Consumers			
Route of Exposure	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							0.026 mg/kg
Inhalation				0.5 mg/m3				0.09 mg/m3
Dermal				0.071 mg/kg				0.026 mg/kg

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	
Fresh water sediments	
Marine water	
Marine sediments	
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	
Air	

Chemical Name:
diethylenetriamine

EC No.: 203-865-4

CAS-No.: 111-40-0

DNELs - Derived no effect level

	Workers				Consumers			
Route of Exposure	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				4.88 mg/kg bw/day			
Inhalation	2.6 mg/m3	92.1 mg/m3	0.87 mg/m3	15.4 mg/m3		27.5 mg/m3		4.6 mg/m3
Dermal			1.1 mg/cm2	11.4 mg/kg bw/ day				4.88 mg/kg bw/ day

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.56 mg/L
Fresh water sediments	1072 mg/kg dw
Marine water	0.056 mg/L
Marine sediments	107.2 mg/kg dw
Food chain	
Microorganisms in sewage treatment	6 mg/L
soil (agricultural)	214 mg/kg
Air	

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Pale yellow
Physical State	LIQUID
Odor	AMMONIA
Odor threshold	n/a
pH	n/a
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	

	36 - 36
Flash Point, (°C)	109
Evaporation rate	n/a
Flammability (solid, gas)	n/a
Upper/lower flammability or explosive limits	n/a - n/a
Vapour Pressure	7.8 mmHg @ 21°C
Vapour density	n/a
Relative density	1.0
Solubility in / Miscibility with water	Not determined
Partition coefficient: n-octanol/water	n/a
Auto-ignition temperature (°C)	n/a
Decomposition temperature (°C)	n/a
Viscosity	100 mPa.s (23 °C)
Explosive properties	n/a
Oxidising properties	n/a

9.2 Other information

VOC Content g/l: 40.00

Grams of VOC per liter of coating product as applied per ISO 11890-1 and/or ISO 11890-2.

Specific Gravity (g/cm3) 1.00

SECTION 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 (NOx), dense black smoke.

SECTION 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.	Name According to EEC	Oral LD50	Dermal LD50	Vapor LC50	Gas LC50	Dust/Mist LC50
140-31-8	2-piperazin-1-ylethylamine	1999 mg/kg, oral, rat	866 mg/kg, dermal, rabbit	No information	No information	No information
98-54-4	4-tert-Butylphenol	>2000 mg/kg	5600 mg/kg	No information	No information	No information
111-40-0	diethylenetriamine	1553 mg/kg (oral, rat)	1090 mg/kg	No information	No information	0.07 mg/L / 4 hour (inh, rat)
112-24-3	Triethylenetetramine	1716 mg/kg (oral, rat M-F)	1465 mg/kg (dermal, rabbit, M-F)	No information	No information	No information
31326-29-1	4,4' - isopropylidenediphenol oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with dietheylenetriamine	540 mg/kg, rat	1494 mg/kg, rabbit		0.000	0.000

Additional Information:
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 Other adverse effects: No information

CAS-No.	Name According to EEC	EC50 48hr	IC50 72hr	LC50 96hr
140-31-8	2-piperazin-1-ylethylamine	58 mg/l (Daphnia)	1000 mg/l (EC50, Algae)	2190 mg/l (EC50, fish)
98-54-4	4-tert-Butylphenol	3.4 to 4.5 mg/l	2.4 mg/l	4.71 to 5.62 mg/l

111-40-0	diethylenetriamine	16 mg/L (Daphnia magna, DIN 38412 T.11)	No information	430 mg/L
112-24-3	Triethylenetetramine	31.1 mg/L (Daphnia, EC50, static)	No information	330 mg/L (fish, LC50, static)
31326-29-1	4,4' - isopropylidenediphenol oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with dietheylenetriamine	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

14.1	**UN number**	UN3066
14.2	**UN proper shipping name**	PAINT
	Technical name	(4-terz-butilfenolo)
14.3	**Transport hazard class(es)**	8
	Subsidiary shipping hazard	Shipping Hazard (Marine Pollutant)
14.4	**Packing group**	II
14.5	**Environmental hazards**	Shipping Hazard (Marine Pollutant)
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

SECTION 15: Regulatory Information

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

National Regulations:

Denmark Product Registration Number:	Not available
Danish MAL Code:	5 - 6
Danish MAL Code - Mixture:	5 - 6
Sweden Product Registration Number:	Not available
Norway Product Registration Number:	Not available
Germany WGK Class:	2
Directive 2004/42/CE :	40
Covered by Directive 2012/18/EC (Seveso III):	H2; H3
Restrictions to product or to substances according to Annex XVII, Regulation (CE) 1907/2006:	Not applicable

Annex XIV - Authorisation List:

CAS-No.	Name According to EEC
Not Applicable	

SVHC - Substances of very high concern (Candidate List):

CAS-No.	Name According to EEC
98-54-4	4-tert-Butylphenol

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.
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.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H361f	Suspected of damaging fertility.
H361fd	Suspected of damaging fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H410	Very 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):
01 - Identification
11 - Toxicological Information
12 - Ecological Information
15 - Regulatory Information
Revision Statement(s) Changed

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/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

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.