



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	10450000	Revision Date:	24/05/2017
Product Name:	THERMALINE 450 - B	Supersedes Date:	23/05/2017
		Version Number:	1
1.2 Relevant identified uses of the substance or mixture and uses advised against	Hardener for 2 components coatings - Industrial use.		
Product to be mixed with:	THERMALINE 450 - A		
Mixing ratio by volume Part A/ Part B:	4 / 1		
1.3 Details of the supplier of the safety data sheet			
Importer:	StonCor Europe 9, Rue du Travail - 1400 Nivelles, Belgium		
Manufacturer:	Carboline Italia, S.p.a. Via Margherita Vigano' De Vizzi . n 77 20092 Cinisello Balsamo (MI) Italy		
	Regulatory / Technical Information: +32 67493710 Nivelles, Belgium +39 02253751 Cinisello Balsamo, Italy		
Datasheet Produced by:	Solvesi, Anna - ehs@stoncor.com		
1.4 Emergency telephone number:	CHEMTREC +1 703 5273887 (Outside US) PPC +1 412 6816669 (Outside US) Centro Antiveleni di Roma +39 06 49978000 (CAV Policlinico Umberto I - Roma)(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
Acute Toxicity, Inhalation, category 4	H332
STOT, single exposure, category 3, RTI	H335

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

Benzyl alcohol, 1,2-cyclohexanediamine

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.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.

PRECAUTION PHRASES

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
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

SECTION 3: Composition/Information On Ingredients

3.2 Mixtures

Hazardous Ingredients

<u>CAS-No.</u>	<u>EINEC No.</u>	<u>Name According to EEC</u>	<u>%</u>
694-83-7	211-776-7	1,2-cyclohexanediamine	50-75
100-51-6	202-859-9	Benzyl alcohol	25-50

<u>CAS-No.</u>	<u>REACH Reg No.</u>	<u>CLP Symbols</u>	<u>CLP Hazard Statements</u>	<u>M-Factors</u>
694-83-7	01-2119976312-37	GHS05-GHS07	H302-312-314-332-335	
100-51-6	01-2119492630-38	GHS07	H302-319-332	

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. Call a physician or poison control centre immediately.

AFTER SKIN CONTACT: Wash off immediately with soap and plenty of water while removing all contaminated clothes and

shoes.

AFTER EYE CONTACT: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. 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.

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

Should not be released into the environment.

6.3 Methods and material for containment and cleaning up

Pick up and transfer to properly labelled containers. Prevent further leakage or spillage if safe to do so.

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

Wear personal protective equipment. Avoid contact with skin and clothing.
When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: No Information

STORAGE CONDITIONS: Keep container tightly closed in a dry and well-ventilated place.

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>
1,2-cyclohexanediamine	694-83-7				
Benzyl alcohol	100-51-6				

<u>Name</u>	<u>CAS-No.</u>	<u>OEL Note</u>
1,2-cyclohexanediamine	694-83-7	
Benzyl alcohol	100-51-6	

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.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: Respirator with a vapour filter (EN 141). Wear a positive-pressure supplied-air respirator.

EYE PROTECTION: Tightly fitting safety goggles.

HAND PROTECTION: Impervious butyl rubber gloves. Nitrile rubber. Protective gloves complying with EN 374.

PVC/Neoprene/Chemical resistant apron. Long sleeved clothing. Remove and wash contaminated clothing before re-use.

OTHER PROTECTIVE EQUIPMENT: No Information

ENGINEERING CONTROLS: Ensure adequate ventilation, especially in confined areas.

Chemical Name:

1,2-cyclohexanediamine

EC No.:

211-776-7

CAS-No.:

694-83-7

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							750 µg/kg bw/day
Inhalation	500 µg/m ³		250 µg/m ³		250 µg/m ³		125 µg/m ³	
Dermal	High hazard (no threshold derived)		High hazard (no threshold derived)	1.5 mg/kg bw/day	High hazard (no threshold derived)		High hazard (no threshold derived)	750 µg/kg bw/day

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	420 µg/L
Fresh water sediments	1.82 mg/kg sediment dw
Marine water	42 µg/L
Marine sediments	182 µg/kg sediment dw
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	117 µg/kg soil dw
Air	

Chemical Name:

Benzyl alcohol

EC No.:

202-859-9

CAS-No.:

100-51-6

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					25 mg/Kg bw/day		5 mg/Kg bw/day
Inhalation		110 mg/m ³		22 mg/m ³		40.55 mg/m ³		8.11 mg/m ³
Dermal		40 mg/kg bw/day		8 mg/kg bw/day		28.5 mg/Kg bw/day		5.7 mg/Kg bw/day

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	1 mg/l
Fresh water sediments	5.27 mg/Kg wwt
Marine water	0.1 mg/l
Marine sediments	0.527 mg/Kg wwt
Food chain	
Microorganisms in sewage treatment	39 mg/l
soil (agricultural)	0.456 mg/Kg wwt
Air	

SECTION 9: Physical and Chemical Properties**9.1 Information on basic physical and chemical properties**

Appearance:	Viscous Amber Liquid
Physical State	LIQUID
Odor	Strong Amine
Odor threshold	Not determined
pH	N/A
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	205 - N.D.
Flash Point, (°C)	94
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	Not determined
Vapour Pressure	<10,34 mmHg @ 21 °C
Vapour density	Not determined
Relative density	1.04
Solubility in / Miscibility with water	N/D
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Not determined
Decomposition temperature (°C)	Not determined
Viscosity	Not determined
Explosive properties	Not determined
Oxidising properties	Not determined

9.2 Other information

VOC Content g/l:	350
Grams of VOC per liter of coating product as applied per ISO 11890-1 and/or ISO 11890-2.	
Specific Gravity (g/cm ³)	1.04

SECTION 10: Stability and Reactivity**10.1 Reactivity**

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

No Information

10.3 Possibility of hazardous reactions

No Information

10.4 Conditions to avoid

No Information

10.5 Incompatible materials

No Information

10.6 Hazardous decomposition products

No Information

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:

<u>CAS-No.</u>	<u>Name According to EEC</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
694-83-7	1,2-cyclohexanediamine	1752 mg/kg, rat, oral		
100-51-6	Benzyl alcohol	1230 mg/kg rat	2980 mg/kg, rabbit	

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

<u>CAS-No.</u>	<u>Name According to EEC</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
694-83-7	1,2-cyclohexanediamine	No information	No information	
100-51-6	Benzyl alcohol	400 mg/L (daphnia magna)	700 mg/L (algae)	10 mg/L (fish)

SECTION 13: Disposal Considerations

- 13.1 WASTE TREATMENT METHODS:** It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations.

European Waste Code: 080111*
 Packaging Waste Code: 150110

SECTION 14: Transport Information

- | | |
|--|-----------------------|
| 14.1 UN number | UN 3066 |
| 14.2 UN proper shipping name | .PAINT |
| Technical name | Not applicable |
| 14.3 Transport hazard class(es) | 8 |
| Subsidiary shipping hazard | Not applicable |
| 14.4 Packing group | II |
| 14.5 Environmental hazards | Marine Pollutant : NO |
| 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: Not available

Danish MAL Code - Mixture:	Not available
Sweden Product Registration Number:	Not available
Norway Product Registration Number:	Not available
WGK Class:	1
Directive 2004/42/CE :	350 g/l (subcat j)

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.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

Reasons for revision

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

- 01 - Identification
 - 11 - Toxicological Information
- 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/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.