Safety Data Sheet
according to Regulation (EC)
No. 453/2010

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

1.1 Product Identifier PL4500PARTB

Product Name: Plasite 4500 Part B

Revision Date: 14/01/2014

Supercedes Date: 14/01/2014

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

Importer: None

Manufacturer:

StonCor Middle East L.L.C.
Plot # B518, Al Quoz Industrial Area 3
P.O. Box: 3034
Dubai, U.A.E.

Regulatory / Technical Information:
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2. Hazard Identification

2.1 Classification of the substance or mixture

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

Acute Toxicity, Oral, category 4
Acute Toxicity, Inhalation, category 4
Hazardous to the aquatic environment, Chronic, category 2
Serious Eye Damage, category 1
Reproductive Toxicity, category 2
Skin Corrosion, category 1
Skin Sensitizer, category 1

Classification according to Dangerous Preparation Directive - EC Directive 1999/45/EC

Corrosive

2.2 Label elements

Symbol(s) of Product

Signal Word

Danger

Named Chemicals on Label

4,4'-isopropylidenediphenol, benzyl alcohol, benzyldimethylamine, diethylenetriamine, 2-piperazin-1-ylethylamine, 3-aminomethyl-3,5,5-trimethylcyclohexylamine, 4-nonylphenol, branched

HAZARD STATEMENTS

Acute Toxicity, Oral, category 4	H302	Harmful if swallowed.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic to aquatic life with long lasting effects.
Serious Eye Damage, category 1	H318	Causes serious eye damage.
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.
P270	Do no eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P281	Use personal protective equipment as required.
P303+361+353	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+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+313	IF exposed or concerned: Get medical advice/attention
P310	Immediately call a POISON CENTER or doctor/physician.
P391	Collect spillage.

2.3 Other hazards

Not applicable

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

3. Composition/Information On Ingredients

3.2 Mixtures

Hazardous Ingredients

CAS-No.	EINEC No.	Name According to EEC	%	R-Phrases
111-40-0	203-865-4	diethylenetriamine	10-25	R21/22-34-43
100-51-6	202-859-9	benzyl alcohol	10-25	R20/22
2855-13-2	220-666-8	3-aminomethyl-3,5,5-trimethylcyclohexylamine	10-25	R21/22-34-43-52/53
80-05-7	201-245-8	4,4'-isopropylidenediphenol	10-25	R36/37-41-43-52-62
68609-08-5	614-657-1	cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with bisphenol a diglycidyl ether homopolymer	2.5-10	
140-31-8	205-411-0	2-piperazin-1-ylethylamine	2.5-10	R21/22-34-43-52/53
84852-15-3	284-325-5	4-nonylphenol, branched	2.5-10	R22-34-50/53-62-63
103-83-3	203-149-1	benzyldimethylamine	1.0-2.5	R10-20/21/22-34-52/53
556-67-2	209-136-7	octamethylcyclotetrasiloxane	<0.1	R53-62

CAS-No.	REACH Reg No.	CLP Symbols	CLP Hazard Statements	M-Factors
111-40-0		GHS05-GHS06	H302-312-314-317-318-331	
100-51-6		GHS07	H302-319-332	
2855-13-2		GHS05-GHS07	H302-312-314-317-318-412	
80-05-7		GHS05-GHS07-GHS08	H317-318-335-361	
68609-08-5		GHS09	H411	
140-31-8		GHS05-GHS07	H302-312-314-317-318-412	
84852-15-3		GHS05-GHS07-GHS08-GHS09	H302-314-318-361-400-410	
103-83-3		GHS02, GHS07	H226-302-312-332-412	
556-67-2		GHS08	H361-413	

Additional Information: The text for CLP Hazard Statements shown above (if any) is given in Section 16.

4. First-aid Measures

4.1 Description of First Aid Measures

AFTER INHALATION: Move to fresh air. Consult a physician after significant exposure.
AFTER SKIN CONTACT: Use a mild soap if available. If skin irritation persists, call a physician. 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. Give small amounts of water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Toxic if swallowed. Irritating to eyes, respiratory system and skin.

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

Flash back possible over considerable distance. In the event of fire, wear self-contained breathing apparatus. High volume water jetUse 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. Remove all sources of ignition.

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.

7. Handling and Storage

7.1 Precautions for safe handling

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Vapours may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Electrical equipment should be protected to the appropriate standard. Preparation may charge electrostatically: always use earthing leads when transferring from one container to another. Use only in area provided with appropriate exhaust ventilation. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment. Do not breathe vapours or spray mist. Use only explosion-proof equipment. Keep away from sources of ignition - No smoking. 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 (EU)

Name	%	LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3	OEL Note
diethylenetriamine	10-25					
benzyl alcohol	10-25					
3-aminomethyl-3,5,5-trimethylcyclohexylamine	10-25					
4,4'-isopropylidenediphenol	10-25					
cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with bisphenol a diglycidyl ether homopolymer	2.5-10					
2-piperazin-1-ylethylamine	2.5-10					
4-nonylphenol, branched	2.5-10					
benzyldimethylamine	1.0-2.5					
octamethylcyclotetrasiloxane	<0.1					

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified at the EU level under the dangerous substances and preparations regulation.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: Respirator with a vapor filter.

EYE PROTECTION: Tightly fitting safety goggles.

HAND PROTECTION: Rubber or plastic gloves. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Long sleeved clothing. Remove and wash contaminated clothing before re-use.

OTHER PROTECTIVE EQUIPMENT: No Information

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Black Or Clear Liquid
Physical State	Liquid
Odor	Ammoniacal
Odor threshold	Not determined
pH	Not determined
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	65 - 222
Flash Point, (°C)	95
Evaporation rate	Slower than ether
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	0 - 0
Vapour Pressure, mmHg	Not determined
Vapour density	Heavier than air

Relative density	Not determined
Solubility in / Miscibility with water	Not Determined
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:	0
Specific Gravity (g/cm3)	1.046

10. Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under recommended storage conditions. Risk of ignition.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not 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:	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
111-40-0	diethylenetriamine	1080 mg/kg, oral, rat	1090 mg/kg	10 mg/L / 1 hour, inh, rat
100-51-6	benzyl alcohol	1230 mg/kg rat, oral		1000 ppm / 8 hrs rat, inhalation
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	500 mg/kg oral		
80-05-7	4,4'-isopropylidenediphenol	5000 mg/kg, oral, rat	3000 mg/kg, oral, rabbit	
140-31-8	2-piperazin-1-ylethylamine	2140 mg/kg, oral, rat		
84852-15-3	4-nonylphenol, branched	1620 mg/kg oral		
556-67-2	octamethylcyclotetrasiloxane	4801 mg/kg, oral, rat		2975 PPM, rat, inh

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: The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

12.6 Other adverse effects: No information

CAS-No.	Name According to EEC	EC50 48hr	IC50 72hr	LC50 96hr
111-40-0	diethylenetriamine	780 mg/l	No information	430 mg/l
100-51-6	benzyl alcohol	No information	No information	
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	No information	No information	
80-05-7	4,4'-isopropylidenediphenol	10.2 mg/l	No information	205 mg/l

68609-08-5	cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with bisphenol a diglycidyl ether homopolymer	No information	No information
140-31-8	2-piperazin-1-ylethylamine	No information	No information
84852-15-3	4-nonylphenol, branched	No information	No information
103-83-3	benzyldimethylamine	No information	No information
556-67-2	octamethylcyclotetrasiloxane	No information	No information

Further Ecological Information

Contains the following ingredients which are classified as water dangerous according to EEC directive No. 76/464/EEC in percentages > 1%.

CAS-No.	Name According to EEC
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine
80-05-7	4,4'-isopropylidenediphenol
140-31-8	2-piperazin-1-ylethylamine
84852-15-3	4-nonylphenol, branched
103-83-3	benzyldimethylamine

13. Disposal Considerations

13.1 **WASTE TREATMENT METHODS:** Do not burn, or use a cutting torch on, the empty drum. 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: 08.01.11

14. Transport Information

14.1	**UN number**	UN 3066
14.2	**UN proper shipping name**	Paint
	Technical name	
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.:	
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:**

National Regulations:

Denmark Product Registration Number:

Danish MAL Code:

Sweden Product Registration Number:

Norway Product Registration Number:

WGK Class:

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 CLP Hazard Statements shown in Section 3 describing each ingredient:

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
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.
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.
H413	May cause long lasting harmful effects to aquatic life.

Text for Risk Phrases shown in Section 3 describing each ingredient:

R10	Flammable.
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R20/22	Harmful by inhalation and if swallowed.
R21/22	Harmful in contact with skin and if swallowed.
R22	Harmful if swallowed.
R34	Causes burns.
R36/37	Irritating to eyes and respiratory system.
R41	Risk of serious damage to eyes.
R43	May cause sensitization by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52	Harmful to aquatic organisms.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53	May cause long-term adverse effects in the aquatic environment.
R62	Possible risk of impaired fertility.
R63	Possible risk of harm to the unborn child.

Reasons for revision

This is a new Safety Data Sheet (SDS).

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
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.