



## Safety Data Sheet

prepared to UN GHS Revision 3

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

<b>1.1 Product Identifier</b>	632ACT	<b>Revision Date:</b>	08/12/2017
<b>Product Name:</b>	632 HIGH BUILD EPOXY RESIN ACTIVATOR	<b>Supersedes Date:</b>	01/10/2014
<b>1.2 Relevant identified uses of the substance or mixture and uses advised against</b>	Hardener for 2 components coatings - Industrial use.		
<b>1.3 Details of the supplier of the safety data sheet</b>			
<b>Importer:</b>	Importer		
<b>Manufacturer:</b>	StonCor Africa (Pty.) Ltd. 8 Cresset Road Midrand Industrial Park, Chloorkop P.O. Box 2205 2001, Johannesburg South Africa		
	Regulatory / Technical Information: +27 11 254 5500		
<b>Datasheet Produced by:</b>	Maritz, Rory - ehs@stoncor.com		
<b>1.4 Emergency telephone number:</b>	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 3  
Serious Eye Damage, category 1  
Skin Irritation, category 2  
Skin Sensitizer, category 1

## 2.2 Label elements

### Symbol(s) of Product



### Signal Word

Danger

### Named Chemicals on Label

2,4,6-tris(dimethylaminomethyl)phenol, Benzyl alcohol, 1,3-cyclohexanemethanamine, Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700), trimethyl 1-1,6-hexanediamine, Oxirane, mono [(C12-14-alkyloxy)methyl] derivs.

### HAZARD STATEMENTS

Acute Toxicity, Oral, category 4	H302	Harmful if swallowed.
Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Serious Eye Damage, category 1	H318	Causes serious eye damage.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
Hazardous to the aquatic environment, Chronic, category 3	H412	Harmful to aquatic life with long lasting effects.

### PRECAUTION PHRASES

P261	Avoid breathing 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.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
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+351+338	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:

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

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>%</u>
100-51-6	Benzyl alcohol	25-50
2579-20-6	1,3-cyclohexanemethanamine	10-25
25068-38-6	Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)	2.5-10
25620-58-0	trimethyl 1-1,6-hexanediamine	2.5-10
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	1.0-2.5
68609-97-2	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	1.0-2.5
919-30-2	3-aminopropyltriethoxysilane	0.1-1.0
64-17-5	Ethanol	<0.1
108-83-8	2,6-dimethylheptan-4-one	<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
2579-20-6	GHS07	H302-312	0
25068-38-6	GHS07-GHS09	H315-317-319-411	0
25620-58-0	GHS05-GHS07	H302-314-317-412	0
90-72-2	GHS07	H315-319	0
68609-97-2	GHS07	H315-317	0
919-30-2	GHS05-GHS07	H302-314	0
64-17-5	GHS02-GHS07	H225-319	0
108-83-8	GHS02-GHS07	H226-335	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 (EU)

<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>
Benzyl alcohol	100-51-6				
1,3-cyclohexanemethanamine	2579-20-6				
Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)	25068-38-6				
trimethyl 1-1,6-hexanediamine	25620-58-0				
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2				
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	68609-97-2				
3-aminopropyltriethoxysilane	919-30-2				
Ethanol	64-17-5				
2,6-dimethylheptan-4-one	108-83-8				

<u>Name</u>	<u>CAS-No.</u>	<u>OEL Note</u>
Benzyl alcohol	100-51-6	
1,3-cyclohexanemethanamine	2579-20-6	
Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)	25068-38-6	
trimethyl 1-1,6-hexanediamine	25620-58-0	
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	68609-97-2	
3-aminopropyltriethoxysilane	919-30-2	
Ethanol	64-17-5	

2,6-dimethylheptan-4-one

108-83-8

**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:** Tightly fitting safety goggles.

**HAND PROTECTION:** Impervious gloves. Long sleeved clothing. Remove and wash contaminated clothing before re-use. Rubber or plastic apron.

**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:	Amber
Physical State	Liquid
Odor	Ammonia Like
Odor threshold	Not determined
pH	Alkaline
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	64 - N.D.
Flash Point, (°C)	140
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	1.1 - 13
Vapour Pressure	Not determined
Vapour density	Not determined
Relative density	1.05-1.15
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	300-600cps
Explosive properties	Not determined
Oxidising properties	Not determined

### 9.2 Other information

VOC Content g/l:	6.5
Calculated grams of VOC per liter of coating product as applied.	
Specific Gravity (g/cm <sup>3</sup> )	1.050

## 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 (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), 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: 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.

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>
100-51-6	Benzyl alcohol	1230 mg/kg, rat	2000 mg/kg, rabbit	1000 ppm, rat
2579-20-6	1,3-cyclohexanemethanamine	700 mg/kg, oral (rat)	1700 mg/kg (rabbit)	130 mg/L
25068-38-6	Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)	>2000 mg/kg, rat, oral	>2000 mg/kg, rat	
25620-58-0	trimethyl 1-1,6-hexanediamine	910 mg/kg, oral, rat		
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	2169 mg/kg oral		
68609-97-2	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	17100 mg/kg, oral, rat		
64-17-5	Ethanol	7060 mg/kg, oral, rat		20000 ppm/10 hrs, rat, inhalation
108-83-8	2,6-dimethylheptan-4-one	3200 mg/kg, oral, rat		1979 ppm / 6 hrs, rat, inhalation

**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

<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
2579-20-6	1,3-cyclohexanemethanamine	No information	No information	Not available
25068-38-6	Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)	No information	No information	Not available
25620-58-0	trimethyl 1-1,6-hexanediamine	No information	No information	Not available
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	No information	No information	Not available
68609-97-2	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	No information	No information	Not available
919-30-2	3-aminopropyltriethoxysilane	No information	No information	Not available
64-17-5	Ethanol	No information	No information	Not available
108-83-8	2,6-dimethylheptan-4-one	No information	No information	Not available

## 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** UN 3267
- 14.2 UN proper shipping name** Corrosive, Liquid, Basic, N.O.S.
- Technical name** Not applicable
- 14.3 Transport hazard class(es)** 8
- Subsidiary shipping hazard** Not applicable
- 14.4 Packing group** PG III
- 14.5 Environmental hazards** Not applicable
- 14.6 Special precautions for user** Not applicable
- EmS-No.:** Not applicable
- 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:**

<b>Denmark Product Registration Number:</b>	Not available
<b>Danish MAL Code:</b>	Not available
<b>Danish MAL Code - Mixture:</b>	Not available
<b>Sweden Product Registration Number:</b>	Not available
<b>Norway Product Registration Number:</b>	Not available
<b>WGK Class:</b>	Not available

**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:**

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
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.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

**Reasons for revision**

Composition Information Changed

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

- 02 - Hazard Identification
- 09 - Physical and Chemical Properties
- 14 - Transportation Information
- 15 - Regulatory Information

Revision Statement(s) Changed

**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.