

Safety Data Sheet

according to Regulation (EC) No. 453/2010 according to Regulation (EC) No. 453/2010

Issue Date: 12.02.2015

SECTION 1 : Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : Epoxy Surface And Wet Tolerant Protective Coating Hardener Part B
Product code
Type of product : Paint
Product group : Trade product

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

1.2.1. Relevant identified uses

Main use category : Protective coating
Industrial/Professional use spec : For professional use only
Industrial

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cactus Industrial, Unit 11, Block 6 Trading Estate, Third Road,
Blantyre Industrial Estate, Blantyre. G72 OUP

1.4. Emergency telephone number

Emergency number +44(0) 1698 591 635

SECTION 2 : Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Corr. 1B H314

Skin Sens. 1 H317

Full text of H-phrases: see section 1.6

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xn; R20/22

Xi; R36/38

R43

Full text of R-phrases: see section 1.6

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

GHS07

Signal word (CLP) : Danger

Hazardous ingredients : 3-aminopropyldimethylamine, N,N-dimethyl-1,3-diaminopropane, toluene, 2-methylpropan-1-ol

Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H318 - Eye damage
H361 - May cause damage to unborn child
H373 - may damage organs with prolonged exposure

Precautionary statements (CLP) : P260 - Do not breathe vapours/mist/spray
P264 - Wash hands, forearms and face thoroughly after handling
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves/eye protection/Protective mask
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P302+P352 - IF ON SKIN: Wash with plenty of soap and water

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2.3. Other hazards

No additional information available

SECTION 3 : Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
benzyl alcohol	(CAS No) 100-51-6 (EC no) 202-859-9 (EC index no) 603-057-00-5	10 - 30	Xn; R20/22
2,4,6-tris(dimethylaminomethyl)phenol	(CAS No) 90-72-2 (EC no) 202-013-9 (EC index no) 603-069-00-0	5 - 10	Xn; R22 Xi; R36/38
3-aminopropyl dimethylamine, N,N-dimethyl -1,3-diaminopropane	(CAS No) 109-55-7 (EC no) 203-680-9 (EC index no) 612-061-00-6	5 - 10	R10 Xn; R22 C; R34 R43

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
benzyl alcohol	(CAS No) 100-51-6 (EC no) 202-859-9 (EC index no) 603-057-00-5	10 - 30	Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Oral), H302
2,4,6-tris(dimethylaminomethyl)phenol	(CAS No) 90-72-2 (EC no) 202-013-9 (EC index no) 603-069-00-0	5 - 10	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Irrit. 2, H315
3-aminopropyl dimethylamine, N,N-dimethyl-1,3-diaminopropane	(CAS No) 109-55-7 (EC no) 203-680-9 (EC index no) 612-061-00-6	5 - 10	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317

Full text of R- and H-phrases: see section 16

SECTION 4 : First aid measures

4.1. Description of first aid measures

- First - aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First - aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician. Wash with plenty of soap and water. If skin irritation or rash occurs: Get immediate medical advice/attention. Get medical advice/attention. Wash contaminated clothing before reuse.
- First - aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
- First - aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Causes severe skin burns and eye damage.
- Symptoms/injuries after inhalation : May cause an allergic skin reaction.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available



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SECTION 5 : Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6 : Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use only non-sparking tools. Use special care to avoid static electric charges.

6.1.1. For non-emergency personnel

Protective equipment : protective gloves/eye protection/Protective mask.
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area. Stop leak if safe to do so

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7 : Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Do not breathe vapours/mist/spray. Avoid breathing vapours/mist/spray.

Hygiene measures : Wash hands, forearms and face thoroughly after handling. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Provide local exhaust or general room ventilation. Use only non-sparking tools. Take precautionary measures against static discharge. Comply with applicable regulations.

Storage conditions : Keep container closed when not in use. Store in original container. Keep cool. Protect from sunlight.

Incompatible products : Oxidizing agent. Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8 : Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure
Hand protection : Wear protective gloves
Eye protection : Chemical goggles or face shield
Skin and body protection : Wear suitable protective clothing
Respiratory protection : Wear appropriate mask
Other information : Do not eat, drink or smoke during use.



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: light yellow.
Odour	: Organic solvent smell.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 135 °C
Flash point	: 76 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.01 g/cm ³
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	:
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10 : Stability and reactivity

10.1. Reactivity

Thermal decomposition generates : Corrosive vapours.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Oxidizing agent. Strong acids. Strong bases.

10.6. Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, fumes, nitrogen oxides (NO_x), NH₃, sulphur compounds. Thermal decomposition generates : Corrosive vapours.

SECTION 11 : Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
LD50 oral	1200 mg/kg
LD50 dermal	1280 mg/kg
LC50 inhalation rat (mg/l)	> 0.5 mg/l/4h



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Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Serious eye damage, category 1, implicit
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (repeated exposure)	: Not classified Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTION 12 : Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

Bioaccumulative potential	Not established.
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment

SECTION 13 : Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14 : Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR)	: 2735
UN-No. (IMDG)	: 2735
UN-No.(IATA)	: 2735
UN-No.(ADN)	: Not applicable
UN-No. (RID)	: Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: AMINES, LIQUID, CORROSIVE, N.O.S.(N,N -dimethyl -1,3-propanediamine, Aliphatic amine)
Proper Shipping Name (IMDG)	: AMINES, LIQUID, CORROSIVE, NO.S.(N,N -dimethyl -1,3-propanediamine, Aliphatic amine)
Proper Shipping Name (IATA)	: Amines, liquid, corrosive, n.o.s. (N,N-dimethyl -1,3-propanediamine, Aliphatic amine)
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable
Transport document description (ADR)	: UN 2735 AMINES, LIQUID, CORROSIVE, N.OS.(N,N -dimethyl -1,3-propanediamine, Aliphatic amine), 8, II, (E)
Transport document description (IMDG)	: UN 2735 AMINES, LIQUID, CORROSIVE, N.OS.(N,N -dimethyl -1,3-propanediamine, Aliphatic amine), 8, II

14.3. Transport hazard class(es)

ADR	
Transport hazard class(es) (ADR)	: 8
Danger labels (ADR)	: 8

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IMDG

Transport hazard class(es) (IMDG) : 8
 Danger labels (IMDG) : 8



IATA

Transport hazard class(es) (IATA) : 8
 Hazard labels (IATA) : 8



ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : II
 Packing group (IMDG) : II
 Packing group (IATA) : II
 Packing group (ADN) : Not applicable
 Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No
 Marine pollutant : No
 Other information : No supplementary information available

14.6. Special precautions for user

14.6.1. Overland transport

Classification code (ADR) : C7
 Special provisions (ADR) : 274
 Limited quantities (ADR) : 11
 Excepted quantities (ADR) : E2
 Packing instructions (ADR) : P001, IBC02
 Mixed packing provisions (ADR) : MP15
 Portable tank and bulk container instructions (ADR) : T11
 Portable tank and bulk container special provisions (ADR) : TP1, TP27
 Tank code (ADR) : L4BN
 Vehicle for tank carriage : AT
 Transport category (ADR) : 2
 Hazard identification number (Kemler No.) : 80

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Orange plates :



Tunnel restriction code (ADR)	:	E
EAC code	:	2X
APP code	:	B
14.6.2. Transport by sea		
Special provisions (IMDG)	:	274
Limited quantities (IMDG)	:	1 L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
IBC packing instructions (IMDG)	:	IBC02
Tank instructions (IMDG)	:	T11
Tank special provisions (IMDG)	:	TP1, TP27
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-B
Stowage category (IMDG)	:	A
Stowage and segregation (IMDG)	:	'Separated from' acids.
Properties and observations (IMDG)	:	Colourless to yellowish liquids or solutions with a pungent odour. Miscible with or soluble in water. When involved in a fire, evolve toxic gases. Corrosive to most metals, especially to copper and its alloys. Reacts violently with acids. Cause burns to skin, eyes and mucous membranes.
14.6.3. Air transport		
PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y840
PCA limited quantity max net quantity (IATA)	:	0.5L
PCA packing instructions (IATA)	:	851
PCA max net quantity (IATA)	:	1L
CAO packing instructions (IATA)	:	855
CAO max net quantity (IATA)	:	30L
Special provisions (IATA)	:	A3
ERG code (IATA)	:	8L
14.6.4. Inland waterway transport		
Not subject to ADN	:	No
14.6.5. Rail transport		
Carriage prohibited (RID)	:	No
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 specific for the substance or mixture

15.1.1. EU -Regulations

Contains no substances with Annex XVII restrictions
 Not on the REACH Candidate List Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany
 Water hazard class (WGK) : 2 - hazard to waters

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16 : Other information



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Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of R-, H- and EUH -phrases:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Corr. 1B	Skin corrosion /irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, category 1
H226	Flammable liquid and vapour
H302	Harmful if swallowed
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
H332	Harmful if inhaled
H361	May cause damage to unborn child
H373	May cause damage to organs through repeated or prolonged exposure
R10	Flammable
R20/22	Harmful by inhalation and if swallowed
R22	Harmful if swallowed
R34	Causes burns
R36/38	Irritating to eyes and skin
R43	May cause sensitisation by skin contact
C	Corrosive
Xi	Irritant
Xn	Harmful

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product