1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product information

Trade name : 7680 SIGMACAP PRIMER EP HARDENER

Company : Sigma Paints Saudi Arabia Ltd
PO Box 7509
Dammam 31472
Kingdom of Saudi Arabia

Telephone : 966 3 847 3100

Telefax : 966 3 847 1734

Emergency telephone number : **966 3 8572394**

2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS-No.	EINECS No	CAS-No.	Symbol(s):	R-phrase(s)	Concentration
POLYAMIDE EPOXY ADDUCT					10.00 - 25.00%
xylene	215-535-7	1330-20-7	Xn	R10, R20/21, R38	10.00 - 25.00%
iso-butanol	201-148-0	78-83-1	Xi	R37/38, R41, R10, R67	10.00 - 25.00%
ethylbenzene	202-849-4	100-41-4	F, Xn	R11, R20	2.50 - 10.00%
2,4,6-TRIS-(DIMETHYLAMINOMETHYL)-PHENOL	202-013-9	90-72-2	Xn	R22, R36/38	2.50 - 10.00%

For components with an occupational threshold limit value see chapter 8.

3. HAZARDS IDENTIFICATION

Harmful

Hazardous components :
xylene
TRIETHYLENETETRAMINE

R-phrase(s) :
FLAMMABLE.
HARMFUL BY INHALATION AND IN CONTACT WITH SKIN.
IRRITATING TO RESPIRATORY SYSTEM AND SKIN.
RISK OF SERIOUS DAMAGE TO EYES.
MAY CAUSE SENSITIZATION BY SKIN CONTACT.

S-phrase(s) :
Do not breathe spray.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wear suitable protective clothing, gloves and eye/face protection.
In case of insufficient ventilation, wear suitable respiratory equipment.

4. FIRST AID MEASURES

General advice	:	When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person.
Eye contact	:	Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Remove contact lenses. Seek medical advice.
Skin contact	:	Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Inhalation	:	Remove to fresh air. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice.
Ingestion	:	If accidentally swallowed obtain immediate medical attention. Keep at rest. Do not induce vomiting.

5. FIRE-FIGHTING MEASURES

Specific hazards during fire fighting	:	As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.
Special protective equipment for fire-fighters	:	In the event of fire, wear self-contained breathing apparatus.
Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Keep containers and surroundings cool with water spray.
Extinguishing media which must not be used for safety reasons	:	Do NOT use water jet.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	:	Use personal protective equipment. Ventilate the area. Refer to protective measures listed in sections 7 and 8. Wear respiratory protection. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Remove all sources of ignition.
Environmental precautions	:	Try to prevent the material from entering drains or water courses. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods for cleaning up	:	Clean with detergents. Avoid solvents. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceus earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Additional advice	:	Refer to section 15 for specific national regulation.

7. HANDLING AND STORAGE

Handling

Safe handling advice	:	Avoid exceeding of the given occupational exposure limits (see section 8). Use only in area provided with appropriate exhaust ventilation. Avoid contact with skin, eyes and clothing. Smoking, eating and drinking should be prohibited in the application area. Avoid inhalation of vapour or mist. For personal protection see section 8.

Advice on protection against fire and explosion : Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. When transferring from one container to another apply earthing measures and use conductive hose material. No sparking tools should be used. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. No smoking. The accumulation of contaminated rags and dry overspray, particularly in spray booth filters, may result in spontaneous combustion. Good housekeeping standards, regular safe removal of waste materials and regular maintenance of spray booth filters will minimise the risks of spontaneous combustion and other fire hazards.

Storage

Requirements for storage areas and containers : Observe label precautions. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store between 5 and 25°C (41 - 77 F) in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Solvent vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Electrical installations / working materials must comply with the technocological safety standards. Keep away from sources of ignition - No smoking. Store in accordance with the particular national regulations (see section 15).

Advice on common storage : Keep away from oxidising agents and strongly acid or alkaline materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Minimum ventilated air quantity for 1 liter of product

TO REACH TLV : 2,653 m3/l Basis: MAC (NL)

TO REACH 10 % LEL : 117 m3/l

TLV of the product : 179 mg/m3 Basis: MAC (NL)

Components with workplace control parameters

Components	CAS-No.	Value [mg/m^3]	Value [ppm]	Basis
xylene *can be absorbed through skin*	1330-20-7	210.00 221.00 442.00	50.00 50.00 100.00	MAC (NL) TWA EU ELV TWA EU ELV STEL
iso-butanol	78-83-1	150.00	50.00	MAC (NL) TWA
ethylbenzene *can be absorbed through skin*	100-41-4	215.00 442.00 884.00	50.00 100.00 200.00	MAC (NL) TWA EU ELV TWA EU ELV STEL

Personal protective equipment

General advice

Respiratory protection	:	When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.
Hand protection	:	For prolonged or repeated contact use protective gloves. Barrier creams may help to protect the exposed areas of skin, they should however not be applied once exposure has occurred. Skin should be washed after contact.
Eye protection	:	Chemical resistant goggles must be worn.
Skin and body protection	:	Personnel should wear protective clothing. Skin should be washed after contact. Working clothes must not consist of textiles, which show a dangerous melting behaviour in case of fire. Workers should wear antistatic footwear.
Additional advice	:	
	:	SigmaKalon Internal Safety Code (INSACO)
Personal protection	:	Enclosing glasses, safety gloves and P2A2 half-face combi mask

Please contact your personal protection equipment supplier for further advice

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	viscous
Colour	:	various
Odour	:	slight amine-like
Flash point	:	29.0 °C
Autoignition temperature	:	> 430 °C
Lower explosion limit	:	1.08 %(V)
Density	:	0.92 g/cm3
Water solubility	:	partly miscible
Viscosity, dynamic	:	400 mPa.s at 23 °C

10. STABILITY AND REACTIVITY

Conditions to avoid	:	Avoid temperatures above 60°C (140 F), direct sunlight and contact with sources of heat.
Hazardous reactions	:	Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.
Hazardous decomposition products	:	In case of fire hazardous decomposition products may be produced such as: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	:	May cause nausea, abdominal spasms and irritation of the mucous membranes.

Acute inhalation toxicity	:	Exposure to component solvent vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects. Such as: mucous membrane irritation, respiratory system irritation, adverse effects on kidney, liver and central nervous system. Symptoms and signs: headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases loss of consciousness.
Skin irritation	:	Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in desiccation of the skin. The product may be absorbed through the skin.
Eye contact	:	May cause irreversible eye damage.
Further information	:	There is no data available for this product.

12. ECOLOGICAL INFORMATION

Further information	:	The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is not classified as dangerous for the environment. See section 2 for details on components.

13. DISPOSAL CONSIDERATIONS

Product	:	The product should not be allowed to enter drains, water courses or the soil. Disposal together with normal waste is not allowed. Special disposal required according to local regulations.

14. TRANSPORT INFORMATION

ADR :
Class : 3 / 31c
UN-No : 1263
ADR/RID-Labels : 3
Limited Quantities: Max. per inner pack.: 5.00 L - Max. per outer pack.: 45.00 L
Proper shipping name : PAINT RELATED MATERIAL

IMDG :
Class : 3
UN-No : 1263
IMDG labels : 3
EmS : 3-05

Packaging group : III

Limited Quantities: Max. per inner pack.: 5.00 L
Proper shipping name : PAINT RELATED MATERIAL

IATA_C :
Class : 3, Sub-risks :
UN-No : 1263
Packaging group : III
Proper shipping name : PAINT RELATED MATERIAL

Note : ADR : Packagings smaller or equal to 450 l, transport according to section E of marginal 2301.

Note : IMDG: Packagings smaller or equal to 450 l, transport according to the provisions of 2.3.2.5

15. REGULATORY INFORMATION

Remarks **:** ***A hard copy of the label is placed in section 3***

Hazardous components which must be listed on the label:

- xylene
- TRIETHYLENETETRAMINE

Symbol(s):	:	Xn	Harmful
R-phrase(s)	:	R10	Flammable.
		R20/21	Harmful by inhalation and in contact with skin.
		R37/38	Irritating to respiratory system and skin.
		R41	Risk of serious damage to eyes.
		R43	May cause sensitization by skin contact.
S-phrase(s)	:	S23	Do not breathe spray.
		S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
		S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
		S38	In case of insufficient ventilation, wear suitable respiratory equipment.
VOC	:	476 g/l Method: Calculated	
National legislation			
Vlarem	:	Vlarem 2A	
CPR Classification	:	K3 Xn	
NER Classification	:	NER Class O.1: 0.0 %(m) NER Class O.2: 29.1 %(m) NER Class O.3: 22.6 %(m)	

16. OTHER INFORMATION

Explanation of R-phrases mentioned in section 2

xylene	R10	Flammable.
	R20/21	Harmful by inhalation and in contact with skin.
	R38	Irritating to skin.
iso-butanol	R37/38	Irritating to respiratory system and skin.
	R41	Risk of serious damage to eyes.
	R10	Flammable.
	R67	Vapours may cause drowsiness and dizziness.
ethylbenzene	R11	Highly flammable.
	R20	Harmful by inhalation.

2,4,6-TRIS-(DIMETHYLAMINOMETHYL)-PHENOL	R22 R36/38	Harmful if swallowed. Irritating to eyes and skin.

The information contained in this safety data sheet is based on the present state of knowledge and current national legislation at the date of issue. The company reserves the right to modify data without notice. Any change in data will normally be followed by issue of a new safety data sheet. The user should check the date of issue and if more than 12 months have elapsed, then the data should only be used after checking with our nearest sales office to establish that they are still valid. . As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. None of the information contained in this safety data sheet can be constructed as a guarantee with regard to the properties of the product described. No liability can be accepted on the basis of this safety data sheet.

After all component(s) stated on the relevant Technical Data Sheet have been mixed the safety precautions mentioned on each of the component(s) safety data sheets and labels should be used in assessing the safety precautions of the mixed product.

For further information see technical data sheet number: 7680