



# Smart Epoxy Tile Topcoat Clear Hardener

## Epoxy Solvent-Free Based Hardener


0.26Kg (Part B)

Version No. : 3.2.19

Issue Date: 14.11.2022

Safety Data Sheet according to CLASS requirement



SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING		
Product Identifier		
Product Name	Smart Epoxy Tile Topcoat Clear Hardener	
Product Code	SPETP-CLEARHD	
Chemical Name	Not Applicable	
Chemical Formula	Not Applicable	
Other means of Identification	Epoxy Solvent-Free Based Hardener	
CAS Number	Not Applicable	
Relevant use of the chemical and restriction		
Relevant identified uses	Use according to manufacturer's directions	
Details of manufacturer / importer		
Registered Company Name	SMART PAINT MANUFACTURING SDN BHD (1031014-A)	
Address	No. 9 & 11, Jalan Indah Gemilang 5, Taman Perindustrian Gemilang, 81800 Ulu Tiram, Johor, Malaysia.	
Telephone	+607-863 9855	
Fax	+607-861 5055	
Email	info@smart-paints.com	
Web	<a href="http://www.smart-paints.com">http://www.smart-paints.com</a>	
Emergency telephone number		
Association / Organisation	Not Applicable	
Emergency telephone number	Not Applicable	
Other emergency telephone number	Not Applicable	
SECTION 2 HAZARDS IDENTIFICATION		
Classification of the substances or mixture		
GHS Classification	<b>Health Hazard</b> Acute Toxicity (Oral) - Category 4 Acute Toxicity (Dermal) - Category 5 Acute Toxicity (Inhalation - Vapor) - Category 4 Acute Toxicity (Inhalation - dust and mist) - Category 4 Serious Eye Damage/ Eye Irritation - Category 1 Skin Corrosion/Irritation - Category 1B Specific Target Organ Toxicity- Single Exposure - Category 2 (Liver, Kidney, Nervous system)  Skin Sensitizer - Category 1 Germ Cell Mutagenicity - Category 2  <b>Environment Hazard</b> Hazardous To The Aquatic Environment – Chronic Hazard - Category 3 Hazardous To The Aquatic Environment – Acute Hazard - Category 3	
Label elements		
GHS label elements		
Signal word	Warning	
Hazard statement(s)		
H304	May be fatal if swallowed and enters airways.	
H340	May cause genetic defects (routes of exposure inhalation or dermal).	
H334	May cause allergic or asthma symptoms or breathing difficulties if inhaled.	
H361	Suspected of damaging fertility or the unborn child (routes of exposure inhalation or dermal).	
H315	Causes skin irritation.	
H335	May cause respiratory irritation.	
H317	May cause allergic skin reaction.	
H412	Harmful to aquatic life with long lasting effects.	

Precautionary statement(s)	
<b>P210</b>	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
<b>P280</b>	Wear protective gloves/protective clothing/eye protection/face protection.
<b>P201</b>	Obtain special instructions before use.
<b>P202</b>	Do not handle until all safety precautionary have been read and understood.
<b>P281</b>	Use personal protective equipment as required.
<b>P261</b>	Avoid breathing dust/fume/gas/mist/vapours/spray.
<b>P285</b>	In case of inadequate ventilation wear respiratory protection.
<b>P264</b>	Wash thoroughly after handling.
<b>P271</b>	Use only outdoors or in a well-ventilated area.
<b>P272</b>	Contaminated work clothing shall not be allowed out of the workplace.
<b>P273</b>	Avoid release to the environment.

## SECTION 2 HAZARDS IDENTIFICATION

### Precautionary statement(s) Response

<b>P303+P361+P353</b>	IF ON SKIN (or hair) : Remove/take off immediately all contaminated clothing. Rinse skin with water / shower.
<b>P370+P378</b>	In case of fire : Evacuate area.
<b>P301+P310</b>	IF SWALLOWED : Immediately call a POISON CENTER or doctor/physician.
<b>P331</b>	Do NOT induce vomiting.
<b>P308+P313</b>	IF exposed or concerned : Get medical advice / attention.
<b>P304+P341</b>	IF INHALED : If breathing is difficult, remove victim to fresh air and keep at rest.
<b>P342+P311</b>	If experiencing respiratory symptoms : CALL a POISON CENTER or doctor / physician .
<b>P302+P352</b>	IF ON SKIN : Wash with plenty of water and soap.
<b>P321</b>	Specific treatment (see information on this label).
<b>P332+P313</b>	If skin irritation occurs : Get medical advice / attention
<b>P362</b>	Take off contaminated clothing and was before reuse.
<b>P304+P340</b>	IF IIF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
<b>P312</b>	Call a POISON CENTRE or doctor/physician if you feel unwell.
<b>P333+P313</b>	If skin irritation or rash occurs : Get medical advice / attention.
<b>P363</b>	Wash contaminated clothing before reuse.

### Precautionary statement(s) Storage

<b>P403+P235</b>	Store in a well - ventilated place. Keep cool.
<b>P405</b>	Store in locked up.
<b>P403+P233</b>	Store in a well - ventilated place. Keep container tightly closed.

### Precautionary statement(s) Disposal

<b>P501</b>	Dispose of content/ container to appropriate waste site or reclaimer in accordance with local or national regulations.
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## SECTION 3 COMPOSITION / INFORMATION OF INGREDIENTS

CAS number	% [weight]	Name
-	<70	Aliphatic amine
-	<30	Cycloaliphatic amine

## SECTION 4 FIRST AID MEASURES

### Description of first aid measure

<b>Eye contact</b>	• Check or and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelid open. Do not use an eye ointment. Seek for medical attention.
<b>Skin contact</b>	• Frequent or prolonged contact may irritate and cause dermatitis. Skin contact may aggravate an exiting dermatitis condition. Remove contaminated clothing – launder before reuse. Wash gently and thoroughly the contaminated skin with running water and non-abrasive soap. Get medical attention if redness or irritation occurs.
<b>Inhalation</b>	• High vapour (>1000 ppm) are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anaesthesia. Drowsine unconsciousness and other central nervous system effects. Evacuate the victim to a safe area as soon as possible. If the victim is not breathing, perform mouth to mouth resuscitation. Administer oxygen if available. Allow the victim to rest in a well ventilated area. Seek medical attention.

## SECTION 5 FIREFIGHTING MEASURES

### Suitable Fire Extinguishing Media :

Small fire : Use dry chemical. Foam or CO2.

Large fire : Use water spray. Fog or foam. Water or foam may cause frothing.

### Special Protective Actions For Fire Fighters:

Cool container in water spray in order to prevent pressure build-up, auto ignition or explosion. Avoid flushing spilled material into sewers, stream or other bodies of water. For small outdoor fires, portable fire extinguishers may be used, and self contained breathing apparatus (SCBA) may not be required. Respiratory and eye protection are required for fire fighting personnel.

### Specific Hazards Arising From The Chemical :

Static discharge, material can accumulate static charges which can cause an incendiary electrical discharge. "Empty" containers retain product residue (liquid and/or vapour) and can be dangerous. DO NOT pressurize, cut, weld braze, solder, drill grind, or expose such containers to heat, flame sparks, static electricity, or other sources of ignition ; they may explode and cause injury or death.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment And Emergency Procedure

#### Eye /skin protection :

Where there is potential for eye contact, wear chemical goggles and have eye flushing equipment immediately available. Wear appropriate protective clothing and chemical resistant gloves to prevent skin contact. Wear a face shield and chemical resistant clothing such as rubber apron when splashing is likely.

#### Respiratory Protection :

Use JKKP/NIOSH approved respiratory protection (full face piece recommended) when exposure limits are exceeded.

#### Ventilation :

Provide natural or mechanical ventilation to control exposure levels below airborne exposure limits. If practical, use local mechanical exhaust ventilation at source of air contamination such as open process equipment.

#### Environment Precaution

Flammable liquid. Ventilate. Eliminate all sources of ignition. Prevent additional discharge of material. For small spills implement cleanup procedure; for large spills implement cleanup procedure and if in public area, keep public away and advise authorities , provide suitable personal protective. dike and contain spill with inert material (sand, earth, etc) and transfer liquid and solid separately to container for recovery or disposal. Report as per regulatory or disposal. Do not use combustible material such as sawdust. Report as per regulatory equipment.

#### Methods And Materials For Containments And Clean Up

For small liquid spills (<1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residue to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose to all salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Remove contaminated soil and dispose of safely.

## SECTION 7 HANDLING AND STORAGE

### Precautions For Safe Handling

Avoid smoking and use of open fire. Avoid inhalation of vapours and contact with skin and eyes. Observe good industrial practices.

### Condition For Safe Storage ,including Any Incompatibilities

Store in tightly closed original container in well-ventilated area. Avoid expose to direct sunlight.

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control Parameters/ Occupational Limits

Ingredient/Bahan	ACGIH TLV-TWA		OSHA PEL-TWA	
	ppm	mg/m3	ppm	mg/m3

### APPROPRIATE ENGINEERING CONTROL MEASURES

If user operations generate dust, fumes, gas, vapours or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Emission from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### PERSONAL PROTECTION

#### Respiratory protection

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Recommended : Full mask with type Cartridge filter.

#### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. After contamination with product change the gloves immediately and dispose of them according to relevant national and local regulations.

#### Eye protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Recommended : Safety glasses with side-shields.

#### Skin/ Body Protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Recommended : Wear protective clothing.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance / colour	Liquid / Yellow
Solid	100.0%
Specific Gravity (@ 25°C)	1.07
Viscosity (Ku)	Not applicable
*Boiling Point	>200°C
*Melting Point	Not applicable
*Vapour Pressure (@ 20°C)	Not applicable
Vapour Density (101.3 kPa / air=1)	Not applicable
Evaporation Rate (n - Butyl Ether=1)	Not applicable
Solubility	Not applicable
Odour	Ammoniacal

## SECTION 10 STABILITY AND REACTIVITY

### REACTIVITY

No dangerous reaction known under condition of normal use.

### CHEMICAL STABILITY

Stable under normal temperature conditions and recommended use.

### POSSIBILITY OF HAZARDOUS REACTION

Under normal conditions of storage and use, hazardous reaction will not occur.

### CONDITIONS TO AVOID

Heat, flame, sparks.

Nitric acid, sulfuric acid, strong oxidizing agents.

Electrostatic accumulation hazard? If Yes, use proper grounding procedure.

### HAZARDOUS DECOMPOSITION PRODUCTS

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11 TOXICOLOGY INFORMATION

There is no data available on the product itself.

Toxicological information of hazardous ingredients :

Acute toxicity	: Not Classified
Skin corrosion/ irritation	: Dry skin
Serious eye /damage irritation	: Not Classified
Respiratory sensitization	: May lead to dermatitis
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not Classified
Reproductive toxicity	: No data available
Specific target organ toxicity (single exposure)	: No data available
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: No data available
Symptoms/injuries after inhalation	: No data available
Symptoms/injuries after skin contact	: No data available
Symptoms/injuries after eye contact	: Not Classified
Symptoms/injuries after eye ingestion	: Not Classified
Chronic symptoms	: Not Classified

## SECTION 12 ECOLOGICAL INFORMATION

### Ecotoxicity

No data available.

### Persistence And Degradability

No information available.

### Bioaccumulative Potential

Has the potential to bioaccumulate.

### Mobility In Soil

Floats on water. Adsorbs to soil and has low mobility.

### Other Adverse Effects

Do not allow product to reach ground water, water course or sewage system.

#### SECTION 13 DISPOSAL INFORMATION

**Waste Disposal :**

Recover or recycle if possible. Otherwise dispose in accordance with all applicable with all applicable national environment laws and regulations.

**Product Disposal:**

This product when dispose of in its unused and uncontaminated state should be treated as a hazardous waste.

**Container Disposal :**

Drain container thoroughly. Rinse three times with suitable solvent. Treat rinsing as for product disposal. After draining, vent in a safe place away from sparks and fire. Send drum recoverer or metal reclaimer. Residue may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums. Keep container labelled until cleaned and then remove or deface labels.

#### SECTION 14 TRANSPORT INFORMATION

Transport to be in accordance with ADR/RID for road/rail, IMDG for sea and IATA for air.

**LAND TRANSPORT**

Classified as Dangerous Goods by the criteria of the European Agreement concerning the international carriage of Dangerous Goods (ADR) by Road & Regulations concerning the international carriage of Dangerous Goods (RID) by Rail.

**UN Number:** 1263

Proper shipping name : Paint ( including paint, lacquer, enamel, stain, shellac, varnish, liquid filler and liquid lacquer base ) or paint related material (including paint thinning or reducing compound).

**Class:** 3

**Packaging Group:** III

**SEA TRANSPORT**

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG) for the transport of Sea.

**UN Number:** 1263

Proper shipping name : Paint ( including paint, lacquer, enamel, stain, shellac, varnish, liquid filler and liquid lacquer base ) or paint related material (including paint thinning or reducing compound).

**Class :** 3

**Packaging Group:** III

**Marine Pollutant:** No

**SEA (Annex II of MARPOL 73/78 and the IBC Code)/ LAUT (Annex II of MARPOL 73/78 dan the IBC Code) :** Not Applicable

**AIR TRANSPORT**

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for the transport by Air.

**UN Number:** 1263

**Proper shipping name :** Paint ( including paint, lacquer, enamel, stain, shellac, varnish, liquid filler and liquid lacquer base ) or paint related material (including paint thinning or reducing compound).

**Class:** 3

**Packaging Group:** III

#### SECTION 15 REGULATORY INFORMATION

Applicable national regulations :

- OHS 1994 and relevant regulation
- Factories and Machinery Act 1967 and relevant regulations
- Environment Quality Act 1967 and regulations.
- Pesticide Act 1974 and regulations
- Occupational Safety and Health (Classification, Labelling And Safety Data Sheet of Hazardous Chemicals) Reg 2013
- Industry Code Of Practice (On Chemicals Classification And Hazard Communication

#### SECTION 16 OTHER INFORMATION

Date of preparation: 14-11-2022

Date of revision: -

Version: -

**ABBREVIATION/SINGKATAN**

ACGIH American Conference of Governmental Industrial Hygienists

TLV Threshold limit value

TWA Time-Weighted Average

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit

LD50 Lethal Dose

LC50 Median Lethal concentration

IACR International Agency for Research in Cancer

CAS Registry Numbers Chemical Abstracts Service Registry Numbers

ICOP Industry Code Of Practice on Chemical Classification and Health approved by Minister under section 37 of the Act

C Ceiling Limit

CEIL Ceiling Limit airborne concentration

STEL Short Term Exposure Limit

DNA Data Not Available

N/R Not Regulated

**Disclaimer**

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