



Smart Epoxy BE5 Finish Epoxy Paint 1 Litres & 5 Litres

Version No. : 2.1.17

Issue Date: 28.9.2022

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 BE5 Finish |
| Product Code | SPBE5 |
| Chemical Name | Not Applicable |
| Chemical Formula | Not Applicable |
| Other means of Identification | Epoxy Paint |
| 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 | http://www.smart-paints.com |
| 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 | <p>Flammable liquids - Category 3</p> <p>Health Hazard</p> <p>Skin Corrosion/Irritation - Category 2</p> <p>Eye irritation - Category 2</p> <p>Acute Toxicity (Inhalation) - Category 4</p> <p>Acute Toxicity (Dermal) - Category 4</p> <p>Specific Target Organ Toxicity- Repeated Exposure - Category 2</p> <p>Aspiration Hazard - Category 1</p> <p>Environment Hazard</p> <p>Hazardous To The Aquatic Environment – Chronic Hazard - Category 2</p> |
| Label elements | |
| GHS label elements | |
| Signal word | Warning |
| Hazard statement(s) | |
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful if in contact with skin. |
| H315 | Causes skin irritation. |
| H319 | Harmful if inhaled. |
| H332 | Causes serious eye irritation |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects. |

| Precautionary statement(s) | |
|----------------------------|--|
| P210 | Keep away from heat/sparks/open flames/hot surfaces. No smoking. |
| P233 | Keep container tightly closed. |
| P242 | Wash thoroughly after handling. |
| P243 | Take precautionary measures against static discharge. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P264 | Wash thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |

| SECTION 2 HAZARDS IDENTIFICATION | |
|--|--|
| Precautionary statement(s) Response | |
| P301+P310 | IF SWALLOWED : Immediately call a POISON CENTER or doctor/physician. |
| P331 | Do NOT induce vomiting. |
| P302+P352 | IF ON SKIN : Wash with plenty of water and soap. |
| P321 | Specific treatment (see information on this label). |
| P332+P313 | If skin irritation occurs : Get medical advice / attention |
| P362 | Take off contaminated clothing and was before reuse. |
| P363 | Wash contaminated clothing before reuse. |
| P304+P340 | IF IIF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P305+P351+P338 | IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lense, if present and easy to do. Continue rinsing. |
| P337+P313 | f eye irritation persist : Get medical advice/attention. |
| P312 | Call a POISON CENTRE or doctor/physician if you feel unwell. |
| P391 | Collect spillage. |
| Precautionary statement(s) Storage | |
| P405 | Store in locked up. |
| Precautionary statement(s) Disposal | |
| P501 | Dispose of content/ container to appropriate waste site or reclaimer in accordance with local or national regulations. |

| SECTION 3 COMPOSITION / INFORMATION OF INGREDIENTS | | |
|--|------------|---------------------------------|
| CAS number | % [weight] | Name |
| - | <20 | Pigment |
| 25068-38-6 | <60 | Epoxy Resin |
| 100-41-4 | <35 | Ethylbenzene |
| 108-65-6 | 0.2 | 2-Propanol, 1-methoxy-2-acetate |
| 109-02-4 | 0.15 | Morpholine,4-methyl |

| SECTION 4 FIRST AID MEASURES | |
|---|--|
| Description of first aid measure | |
| Eye contact | <ul style="list-style-type: none"> 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. |
| Skin contact | <ul style="list-style-type: none"> 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. |
| Inhalation | <ul style="list-style-type: none"> 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 |
| Pigment | - | - | - | - |
| Epoxy Resin | - | - | - | - |
| Ethylbenzene | 100 | 434 | 125 | 543 |
| 2-Propanol,1-methoxy-2-acetate | - | - | - | - |
| Morpholine,4-methyl | - | - | - | - |

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/Colour refer catalogue |
| Solid | 51.0 -61.0% |
| Specific Gravity (@ 25°C) | 1.17 - 1.33 |
| Viscosity (Ku) | 51.0 – 65.0 |
| *Boiling Point | 27 oC |
| *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 | Insoluble in water |
| Odour | Aromatic Hydrocarbon |
| Lower Flammable Limit LEL / Explosion limit (%) | 1.00 |
| Upper Flammable Limit UEL / Explosion limit (%) | 7.00 |

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 decompositions products should not be produced.

| SECTION 11 TOXICOLOGY INFORMATION | | | | | |
|---|-----------|-------------|----------------|------------------|----------------------|
| There is no data available on the product itself. Toxicological information of hazardous ingredients : | | | | | |
| a. Aspiration Hazard | | | | | |
| Ingredient | Oral LD50 | Dermal LD50 | Inh (Gas) LC50 | Inh (Vapor) LC50 | Inh (Dust/mist) LC50 |
| Ethylbenzene | 636 | 1960 | DNA | DNA | DNA |
| b. Acute toxicity (Inhalation) | | | | | |
| Ingredient | Oral LD50 | Dermal LD50 | Inh (Gas) LC50 | Inh (Vapor) LC50 | Inh (Dust/mist) LC50 |
| Epoxy Resin | 15000 | 3160 | DNA | 17.2 | DNA |
| Ethylbenzene | 3500 | 17800 | DNA | 17.2 | DNA |
| c. Acute toxicity (Dermal) | | | | | |
| Ingredient | Oral LD50 | Dermal LD50 | Inh (Gas) LC50 | Inh (Vapor) LC50 | Inh (Dust/mist) LC50 |
| Ethylbenzene | 5000 | 2000 | DNA | 24 | DNA |
| d. Skin Corrosion or irritation | | | | | |
| Ingredient | Oral LD50 | Dermal LD50 | Inh (Gas) LC50 | Inh (Vapor) LC50 | Inh (Dust/mist) LC50 |
| Ethylbenzene | 5000 | 2000 | DNA | 24 | DNA |
| e. Specific Target Organ Toxicity-Repeated Exposure | | | | | |
| Ingredient | Oral LD50 | Dermal LD50 | Inh (Gas) LC50 | Inh (Vapor) LC50 | Inh (Dust/mist) LC50 |
| Ethylbenzene | 5000 | 2000 | DNA | 24 | DNA |
| f. Respiratory Sensitisation | | | | | |
| Ingredient | Oral LD50 | Dermal LD50 | Inh (Gas) LC50 | Inh (Vapor) LC50 | Inh (Dust/mist) LC50 |
| 2-Propanol,1-methoxy-2-acetate | 930 | 3160 | DNA | DNA | DNA |
| Morpholine,4-methyl | 3500 | 17800 | DNA | 17.2 | DNA |

| 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. | | | |
| Ingredient | Fish 96 hour, LC50 | Crustacea 48 hour, EC50 | Algae 72 or 96 hour, ErC50 |
| Pigment | DNA | DNA | DNA |
| Epoxy Resin | 7.19 | 1897 | DNA |
| Ethylbenzene | DNA | DNA | DNA |
| 2-Propanol,1-methoxy-2-acetate | DNA | DNA | DNA |
| Morpholine,4-methyl | 2200 | DNA | 2.6 |

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 pincture, 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 :

- OHSA 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: 28-09-2022

Date of revision:-

Version: 01

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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