SECTION 1 : IDENTIFICATION OF THE CHEMICAL AND OF THE SUPPLIER

Commercial Product Name	: CEMSEAL E100SL PART A
Relevant identified uses	: High-Performance Pigmented Epoxy Coating
Company/Undertaking	: Cemseal Industries Sdn. Bhd.
Address	: No.10, Jalan Emas 29, Taman Sri Putri, 81300 Skudai, Johor, Malaysia.
Tel No.	: +607-558 3320
Email	: info@cemseal.com

SECTION 2 : HAZARDS IDENTIFICATION

According to: CLASS Regulations 2013, Malaysia (adapted from UN GHS Rev. 3)

A. Classification of the substance or mixture

Skin corrosion/irritation	Category 2
Serious eye damage/irritation	Category 2
Skin sensitization	Category 1
Specific target organ toxicity – Repeated exposure	Category 2
Aquatic chronic	Category 2

B. Label Elements

Pictogram:



Signal word: Danger

Hazard statement:

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements:

(Prevention)

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
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.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

(Response)

P314	Get medical advice/attention if you feel unwell.
P321	Specific treatment (see Section 4 of SDS).

P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P302+352	IF ON SKIN: Wash with soap and water.
P332+313	If skin irritation occurs: Get medical advice/attention.
P333+313	If skin irritation or a rash occurs: Get medical advice/attention.
P337+313	If eye irritation persists: Get medical advice/attention.
P305+351+338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

(Storage)
None
(Disposal)

P501	Dispose of contents/container to appropriate waste site or reclaimer in accordance with local or national regulations.

SECTION 3 : COMPOSITION AND INFORMATION OF THE INGREDIENTS

A. Single product or Mixture: Mixture

B. Common chemical name of the product: Epoxy resin (Liquid)

Chemical Name	CAS No.	Content (%)
Bisphenol A type/Epoxy resin	25068-38-6	21 – 47
Cystalline Silica	14808-60-7	20 – 44
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	68609-97-2	5 – 10
Substances determined to be non hazardous	-	Balance

SECTION 4 : FIRST AID MEASURES

A. Description of first aid measures

Inhalation : Move person to fresh air and call for medical assistance immediately. If not breathing, give artificial respiration, if breathing is difficult, give oxygen. Keep at rest.

Skin Contact : In case of contact, immediately flush skin with large amounts of water and soap while removing contaminated clothing and shoes. If irritation persists, get medical attention

Eye Contact : Immediately flush eyes with large amounts of water until irritation subsides. Remove contact lens. Obtain medical attention, preferably by an ophthalmologist, immediately.

Ingestion : DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Keep at rest. Get medical attention immediately.

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

Aside from the information found under description of first aid measures (above) and indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

SECTION 5 : FIRE-FIGHTING MEASURES

A. Extinguishing media

Suitable Extinguishing Media : Alcohol - resistant foam, Carbon dioxide, or dry chemical type.

B. Special Hazards Arising from The Substance or Mixture

Hazardous Combustion Products : Combustion products may include and are not limited to: carbon monoxide, carbon dioxide.

C. Recommended Fire Fighting Procedures

Special protective equipment for firefighters : Wear full protective clothing and NIOSH - approved self - contained breathing apparatus. Use water spray to cool fire - exposed surfaces and to protect personnel. If a leak or spill has not ignited, use water spray to disperse the vapours. If possible, isolate product from heat, electrical equipments, sparks and open flames. Avoid spraying water directly into storage containers. Closed containers may explode when exposed to extreme heat. Avoid spreading burning liquid with water, isolate liquid. Do not allow firefighting to enter drains or watercourses.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

A. Personal precautions, protective equipment and emergency procedures :

Wear appropriate protective equipment, e.g., respirators (R95 masks), eye protection (safety glasses), elbow-length Nitrile gloves and safety shoes. Avoid substance contact with the eyes. Do not inhale vapours. Ensure supply of fresh air in enclosed rooms.

B. Environmental precautions:

Eliminate sources of ignition. Keep public away. Contain spilled liquid with sand or other non-combustible absorbent materials. Wash area and prevent runoff into drains and sewerage system. Advise authorities if substance has entered a watercourse or sewer or has contaminated soil or vegetation.

C. Methods and material for containment and cleaning up:

Clean up all spills immediately. Absorb with materials such as sand, polypropylene fibre products, polyethylene fibre products. Remove residual with soap and hot water. Collect in suitable and properly labelled containers. Residual can be removed with solvent. See Section 13, Disposal Considerations, for additional information.

SECTION 7 : HANDLING AND STORAGE

A. Precautions for safe handling:

Use appropriate personal protective equipment. Keep out of reach of children.

Handle containers with care. Open slowly in order to control possible pressure release. Do not pressurize containers.

Do not ingest. Do not breathe in gas/fumes/vapour. Avoid contact with skin and eyes.

For personal protection, see section 8.
Use only in areas from which all naked lights and other sources of ignition have been excluded.
Take precautionary measures against static discharge.
Protect from frost and extremes of temperature.

B. Conditions for safe storage:

Keep containers tightly closed.
Containers that are opened should be properly resealed and kept upright to prevent leakage.

C. Storage stability

Store in cool, dry and well - ventilated place at temperature between 20°C to 40°C away from heat and sources of ignition.

SECTION 8 : EXPOSURE CONTROLS PERSONAL PROTECTION

A. Control parameters

Chemical Name	ACGIH TLV-TWA		OSHA PEL-TWA	
	ppm	mg/m^3	ppm	mg/m^3
Bisphenol A type/Epoxy resin	-	-	-	-
Cystalline Silica	-	0.03	-	0.05
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	-	-	-	-

B. Exposure controls

Engineering Measures/Controls	:	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits. Ensure eyewash stations and safety showers are close to the workstation location.
Respiratory Protection	:	Use of NIOSH - approved respirators with organic vapour cartridges is recommended or R95 mask.
Hand Protection	:	Use of solvent resistance type or chemical resistant type of protective gloves is recommended (eg. elbow-length Nitrile gloves).
Eye Protection	:	Use of safety glasses or goggles with side shields is recommended.
Skin / Body Protection	:	Wear protective material penetration overalls and safety shoes.
Other protection	:	Work site no smoking, eating and drinking water. After work, be sure to take a shower and change clothes. Pay attention to personal hygiene.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

A. Information on Basic Physical and Chemical Properties

Appearance	Liquid
Odour	Aromatic hydrocarbon odour
Odour threshold	Not available
pH	Not available

Melting point/freezing point	Not available
Initial boiling point and boiling range	Between 203 and 205 °C
Flash point	78 °C
Evaporation rate	Not available
Flammability (solid, gas	Not applicable
Lower flammability or explosive limit	Not available
Upper flammability or explosive limit	Not available
Vapour pressure	Not available
Vapour density	> 1.00 (Vapour is heavier than air)
Relative density	1.45 g/mL
Solubility	Not miscible in water
Partition coefficient	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	5,000 mPa.s at 25 °C

B. Other Information

No additional physical and chemical parameters noted.

SECTION 10 : STABILITY AND REACTIVITY

Reactivity : No dangerous reaction under condition of normal use.

Chemical stability : Stable under recommended storage conditions. See Storage Section 7.

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

Conditions to avoid : Keep away from oxidising agents, strongly alkaline and strongly acidic materials in order to avoid exothermic reactions. Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, drill, grind or expose containers to heat or sources of ignition.

Hazardous decomposition products : When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide, carbon dioxide, oxides of nitrogen and smoke.

SECTION 11 : TOXICOLOGICAL INFORMATION

A. Acute toxicity:

Chemical Name	Oral LD50(Rat),mg/kg	Dermal LD50(Rabbit),mg/kg	Inhalation LC50(Rat),mg/L/4h
Bisphenol A type	11400	1600	Data not available
Cystalline Silica	Data not available	Data not available	No data available
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	26800	Data not available	Data not available

B.	**Skin corrosion/irritation**	:	Causes skin irritation. Frequent or prolonged contact may dry the skin, leading to discomfort and dermatitis.
C.	**Serious eye damage/eye irritation**	:	May be an eye irritant.
D.	**Respiratory or skin sensitisation**	:	Vapour concentrations above the recommended exposure levels may be irritating to the eyes and the respiratory tract.
E.	**Germ cell mutagenicity**	:	No information available on the product.
F.	**Carcinogenicity**	:	Crystalline Silica The International Agency for Research on Cancer (IARC) has classified inhaled crystalline silica (CAS No. 14808-60-7) as a Group 1 carcinogen based on sufficient evident of carcinogenicity in humans and experimental animals. Exposure to inhaled crystalline silica can only occur when it is present in respirable form. Normal application procedures pose no hazard since the crystalline silica is wet and encapsulated but grinding or sanding dried films of this product may yield respirable silica dusts.
G.	**Reproductive toxicity**	:	No information available on the product.
H.	**STOT - single exposure**	:	No information available on the product.
I.	**STOT - repeated exposure**	:	No information available on the product.
J.	**Aspiration toxicity**	:	May be harmful if swallowed and enters airways.

SECTION 12 : ECOLOGICAL INFORMATION

A. Ecotoxicity:

Component: Bisphenol A type

Acute toxicity to fish

LC50, Oncorhynchus mykiss (rainbow trout), semi-static test, 96 Hour, 2 mg/l.

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), static test, 48 Hour, 1.8 mg/l

B. Persistence and degradability:

No information available on the product.

C. Bio accumulative potential:

No information available on the product.

D. Mobility in Soil:

No information available on the product.

E. Results of PBT and vPvB assessment:

This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

F. Other adverse effects:

There is no ecotoxicological test data available on the product itself.

The product should not be allowed to enter drains or water courses.

SECTION 13 : DISPOSAL CONSIDERATIONS

The product should not be allowed to enter drains and watercourses. Preferred methods of waste disposal are incineration or biological treatment in federal/state approved facility. Empty containers should be recycled or disposed through an approved waste management facility or licensed contractor. All federal, state and local environmental regulations shall be observed.

SECTION 14 : TRANSPORTATION INFORMATION

Classified as Dangerous Goods by the criteria of the:

- Dangerous Goods (ADR) by Road .
- Dangerous goods (RID) by Rail.
- International Maritime Dangerous Goods Code (IMDG Code) for transport of Sea.
- International Air Transport Association (IATA).

	UN number	UN proper shipping name	Transport hazard class	Packing group	Environmental hazards
ADR/ RID	UN 3082	Environmentally hazardous substances, liquid (epoxy resin)	9	III	Epoxy resin
IMO/ IMDG	UN 3082	Environmentally hazardous substances, liquid (epoxy resin)	9	III	Epoxy resin
IATA/ ICAO	UN 3082	Environmentally hazardous substances, liquid (epoxy resin)	9	III	Epoxy resin

SECTION 15 : REGULATORY INFORMATION

A. Occupational Safety and Health (DOSH)

- Occupational Safety and Health Act 1994 (Act 514)
- Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 (CLASS Regulations)
- Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000 (USECHH Regulations)

This product is subject to requirements on classification, labelling, Safety Data Sheet (SDS), and permissible exposure limits under the above regulations.

B. Department of Environment (DOE)

- Environmental Quality Act 1974
- Environmental Quality (Scheduled Wastes) Regulations 2005

This product may be subject to environmental control and disposal requirements depending on its classification as scheduled waste.

SECTION 16 : OTHER INFORMATION

A. Issuing date: Apr, 30, 2026

B. Version: E100SL(A)-260430

C. Other Information:

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. Recipients of our product must take responsibility in observing existing laws and regulations.
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