SECTION 1 : IDENTIFICATION OF THE CHEMICAL AND OF THE SUPPLIER

Commercial Product Name	: CEMSEAL E500AS PART A
Relevant identified uses	: Water-Based Epoxy Conductive Primer
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 1C
Eye damage/irritation	Category 1C
Skin sensitization	Category 1
Specific target organ toxicity- repeated exposure	Category 1

B. Label Elements

Pictogram:



Signal word: Danger

Hazard statement:

H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H372	Causes damage to organs through prolonged or repeated exposure.

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 shall not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

(Response)

P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.

P303+P361+P353	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in position comfortable for breathing.
P310	Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314 (Storage)	Get medical advice/attention if you feel unwell.
P405 (Disposal)	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

SECTION 3 : COMPOSITION AND INFORMATION OF THE INGREDIENTS

A. Single product or Mixture:

Material consists of polyamine with fillers and additives in water solution.

Chemical Name	CAS No.	Content (%)
Polyamine Hardener	Trade Secret	30 – 40
Crystalline Silica	14808-60-7	25 – 35
Additives	Trade Secret	1 – 3

SECTION 4 : FIRST AID MEASURES

A. Description of first aid measures

Inhalation: If signs/symptoms develop, move person to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Skin: Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes.

Eye: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist. Suitable emergency eye wash facility should be available in work area.

Ingestion: No emergency medical treatment necessary. If signs/symptoms develop, get medical attention.

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

Eye and skin corrosion.

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

Notes to Physician:

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

SECTION 5 : FIRE-FIGHTING MEASURES

A. Extinguishing media

Suitable Extinguishing Media : Water, foam, dry chemical, carbon dioxide (CO_2).

Unsuitable Extinguishing Media : None known.

B. Special Hazards Arising from The Substance or Mixture

Unusual Fire and Explosion Hazards : Does not present any special fire or explosive hazards.

Hazardous Combustion Products : Upon drying and reaching temperatures of combustion, produces corrosive and/or toxic fumes.

C. Recommended Fire Fighting Procedures

Fire Fighting Procedures : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Structural firefighters' protective clothing will only provide limited protection.

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:

Isolate the area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment.

C. Methods and material for containment and cleaning up:

Contain spilled material if possible. 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. Consult appropriate solvent SDS for handling information and exposure guidelines. See Section 13, Disposal Considerations, for additional information.

SECTION 7 : HANDLING AND STORAGE

A. Precautions for safe handling:

Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

B. Conditions for safe storage: Recommended pumping and storage temperature for bulk shipments is 60°C. Additional storage and handling information on this product may be obtained by calling your sales or customer service contact.

C. Storage stability

Store in a cool, dry, well-ventilated place. Shelf life: Use within 24 Months

SECTION 8 : EXPOSURE CONTROLS PERSONAL PROTECTION

A. Control parameters

Exposure: Silica, TWA 8hr 0.1 mg/m3 (respirable fraction) - USECHH 2000, Malaysia.

B. Exposure controls

Engineering Measures/Controls	:	Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations.
Respiratory Protection	:	Respiratory protection (R95 masks) should be worn.
Hand Protection	:	Wear protective gloves (elbow-length Nitrile gloves).
Eye Protection	:	Tightly fitting safety goggles.
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.
Precautions for safe handling	:	Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

A. Information on Basic Physical and Chemical Properties

Appearance	Liquid
Color	Black
Odor	Slight odor
Boiling Point	Data not available
Decomposition Temperature	Data not available
Specific Gravity	1.08 g/mL
Melting Point/Freezing Point	Data not available
pH	Data not available
Water Solubility	Data not available
Viscosity	65 KU at 25 °C
Oxidizing Properties	Data not available
Vapor Pressure	Data not available
Evaporation Rate	Data not available
Vapor Density	Data not available
Flash Point	> 60 ˚C

LEL	Data not available
Flammability (Solid,gas)	Not flammable based on ingredients
UEL	Data not available
Autoignition	Data not available
Octanol/water Partition coefficient	Data not available

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 : Hazardous polymerization will not occur.

Incompatible materials : No data available.

Conditions to avoid : Avoid flames, sparks, or other sources of ignition.

Hazardous decomposition products : Nitric acid. Ammonia. Nitrogen Oxides. Nitrogen oxide can react with water vapours to form corrosive nitric acid. Carbon Monoxide. Carbon Dioxide. Aldehydes. Flammable hydrocarbon fragments. Nitrosamine.

SECTION 11 : TOXICOLOGICAL INFORMATION

GHS Properties	Classification
Acute toxicity	4000 mg/kg (oral) based on ingredients data and calculation
Skin corrosion/Irritation	Causes skin corrosion based on ingredients data
Serious eye damage/Irritation	Causes eye damage based on ingredients data
Skin sensitization	Causes skin sensitization based on ingredients data
Respiratory sensitization	Not expected to cause respiratory sensitization based on ingredients
Aspiration Hazard	Viscosity criteria of product not met
Carcinogenicity	None known based on ingredients data
Germ Cell Mutagenicity	None known based on ingredients data
Toxicity for Reproduction	None known based on ingredients data
STOT-SE	None known based on ingredients data
STOT-RE	Product contains crystalline silica, on its own in respirable form (particles in air) it could affect lungs. However, the product is in liquid form where the silica is not likely to be released into air. Once the product is cured, it will form a coating where the silica will be held in place by epoxy coating and any release into the air is not possible anymore.

Potential Health Effects

A. Inhalation

Acute (Immediate): Under normal conditions of use, no health effects are expected.
Chronic (Delayed): Under normal conditions of use, no health effects are expected.

B. Skin

Acute (Immediate): Under normal conditions of use, no health effects are expected.
Chronic (Delayed): Under normal conditions of use, no health effects are expected.

C. Eye

Acute (Immediate): Under normal conditions of use, no health effects are expected.
Chronic (Delayed): Under normal conditions of use, no health effects are expected.

D. Ingestion

Acute (Immediate): Under normal conditions of use, no health effects are expected.

SECTION 12 : ECOLOGICAL INFORMATION

A. Toxicity: No data available.
B. Persistence and degradability: No data available.
C. Bio accumulative potential: No data available.
D. Mobility in Soil: No data available.
E. Results of PBT and vPvB assessment: PBT and vPvB assessment has not been carried out.
F. Other adverse effects: No data available.

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

	UN number	UN proper shipping name	Transport hazard class	Packing group	Environmental hazards
Road & Rail	UN 2735	Polyamines, liquid, corrosive, n.o.s.	8	III	No
IMO/ IMDG	UN 2735	Polyamines, liquid, corrosive, n.o.s.	8	III	No
IATA/ ICAO	UN 2735	Polyamines, liquid, corrosive, n.o.s.	8	III	No

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: May, 4, 2026

B. Version: E500AS(A)-260504

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.
THE INFORMATION RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. SUCH INFORMATION IS TO THE BEST OF CEMSEAL KNOWLEDGE AND BELIEF, ACCURATE AND RELIABLE AS FOR THE DATE INDICATED. HOWEVER, NO REPRESENTATION, WARRANTY OR GUARANTEE IS MADE AS TO ITS ACCURACY OR COMPLETENESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY AND COMPLETENESS OF SUCH INFORMATION FOR HIS OWN PARTICULAR USE.