SAFETY DATA SHEET

EPIREZ GENERAL PURPOSE EPOXY MORTAR BINDER [133] COMPOUND

Infosafe No.: 3MPRA ISSUED Date : 27/06/2017 ISSUED by: ITW POLYMERS AND FLUIDS

1. IDENTIFICATION

GHS Product Identifier

EPIREZ GENERAL PURPOSE EPOXY MORTAR BINDER [133] COMPOUND

Company Name

ITW POLYMERS AND FLUIDS (ABN 63 004 235 063)

Address

100 Hassall Street Wetherill Park NSW 2164 Australia

Telephone/Fax Number Tel: +61 2 9757 8800 Fax: +61 2 9757 3855

Emergency phone number 1800 385 556 / 0438 465 960

Emergency Contact Name (02) 9652-1713 A/HRS

Recommended use of the chemical and restrictions on use

Base or Part A of a 2 pack

epoxy system

Requires that the two parts be mixed by hand or mixer before use, in accordance with manufacturers directions. Mix only as much as is required. Do not return the mixed material to the original containers

Use according to manufacturer's directions.

The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation. Epoxy mortar binder.

Additional Information

Website: www.itwpf.com.au

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

Eye Damage/Irritation: Category 2A Hazardous to the Aquatic Environment - Acute Hazard: Category 2 Hazardous to the Aquatic Environment - Long-Term Hazard: Category 2 Sensitization - Skin: Category 1 Skin Corrosion/Irritation: Category 2

Signal Word (s) WARNING

Hazard Statement (s)

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 Statement (s)

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

Pictogram (s)

Exclamation mark, Environment



Precautionary statement – Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Precautionary statement – Response

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

Precautionary statement – Disposal

P501 Dispose of contents/container in accordance with local regulations.

Other Information

Classification of the substance or mixture: HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Classification [1]: FSkin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Skin Sensitizer Category 1, Acute Aquatic Hazard Category 2, Chronic Aquatic Hazard Category 2

Legend: 1. Classified by; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Bisphenol A/ diglycidyl ether resin, liquid	25068-38-6	>60 %

Other Information

Synonyms: Not Available

Substances

See section below for composition of Mixtures

4. FIRST-AID MEASURES

Inhalation

If fumes or combustion products are inhaled remove from contaminated area.

Lay patient down. Keep warm and rested.

Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

Transport to hospital, or doctor.

Ingestion

If swallowed do NOT induce vomiting.

If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

Observe the patient carefully.

Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice.

Skin

If skin contact occurs:

Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.

Eye contact

If this product comes in contact with the eyes:

Wash out immediately with fresh running water.

Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

Seek medical attention without delay; if pain persists or recurs seek medical attention.

Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Indication of immediate medical attention and special treatment needed if necessary

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide.

Specific Methods

Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area.

Specific Hazards Arising From The Chemical

Fire Incompatibility: Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Fire/Explosion Hazard Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include: Carbon dioxide (CO2) Aldehydes Other pyrolysis products typical of burning organic material. Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

Hazchem Code

•3Z

Decomposition Temperature Not Available

6. ACCIDENTAL RELEASE MEASURES

Clean-up Methods - Small Spillages

Environmental hazard - contain spillage. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite.

Clean-up Methods - Large Spillages

Environmental hazard - contain spillage. Moderate hazard. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves.

Other Information

Personal Protective Equipment advice is contained in Section 8(Exposure Controls/Personal Protection) of the SDS.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Safe handling DO NOT allow clothing wet with material to stay in contact with skin Contains low boiling substance: Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately. Check for bulging containers. Vent periodically Always release caps or seals slowly to ensure slow dissipation of vapours Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps.

Other information Store below 38 °C. Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers.

Conditions for safe storage, including any incompatibilities

Suitable container Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.

Storage incompatibility Avoid cross contamination between the two liquid parts of product (kit). If two part products are mixed or allowed to mix in proportions other than manufacturer's recommendation, polymerisation with gelation and evolution of heat (exotherm) may occur. This excess heat may generate toxic vapour Avoid reaction with amines, mercaptans, strong acids and oxidising agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values OCCUPATIONAL EXPOSURE LIMITS (OEL) INGREDIENT DATA: Not Available

EMERGENCY LIMITS

Ingredient / Material name / TEEL-1 / TEEL-2 / TEEL-3

bisphenol A/ diglycidyl ether resin, liquid Epoxy resin includes EPON 1001, 1007, 820, ERL-2795 90 mg/m3 990 mg/m3 5,900 mg/m3

Ingredient / Original IDLH / Revised IDLH bisphenol A/ diglycidyl ether resin, liquid Not Available Not Available

Other Exposure Information

Skin protection: See Hand protection below

Appropriate Engineering Controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

Respiratory Protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Eye Protection

Safety glasses with side shields.

Chemical goggles.

Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.

Hand Protection

When handling liquid-grade epoxy resins wear chemically protective gloves (e.g nitrile or nitrile-butatoluene rubber), boots and aprons.

DO NOT use cotton or leather (which absorb and concentrate the resin), polyvinyl chloride, rubber or polyethylene gloves (which absorb the resin).

DO NOT use barrier creams containing emulsified fats and oils as these may absorb the resin; silicone-based barrier creams should be reviewed prior to use.

NOTE:

The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.

Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.

Personal Protective Equipment

Other protection Overalls. P.V.C. apron. Barrier cream.

Thermal Hazards

Not Available

Footwear Wear safety footwear or safety gumboots, e.g. Rubber

Body Protection See Other protection below

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

Liquid

Appearance

Clear combustible liquid with a characteristic odour; does not mix with water.

Odour Not Available

Decomposition Temperature Not Available

Solubility in Water Immiscible

pH (as supplied): Not Applicable as a solution (1%): Not Applicable

Vapour Pressure Not Available

Vapour Density (Air=1) Not Available

Evaporation Rate Not Available

Physical State Liquid

Odour Threshold Not Available

Viscosity Not Available

Volatile Component Not Available

Partition Coefficient: n-octanol/water Not Available

Surface tension Not Available

Flash Point >100 °C (PMCC)

Flammability Not Applicable

Auto-Ignition Temperature Not Available

Explosion Limit - Upper Not available.

Explosion Limit - Lower Not Available

Explosion Properties Not Available

Molecular Weight Not Applicable

Oxidising Properties Not Available

Initial boiling point and boiling range Not Available

Relative density 1.1 (Water = 1)

Melting/Freezing Point Not Available

Other Information

Taste: Not Available Gas group: Not Available VOC g/L: Not Available

10. STABILITY AND REACTIVITY

Reactivity See section 7(Handling and Storage)

Chemical Stability Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.

Conditions to Avoid See section 7(Handling and Storage)

Incompatible materials See section 7(Handling and Storage)

Hazardous Decomposition Products See section 5(Fire Fighting Measures)

Possibility of hazardous reactions See section 7(Handling and Storage)

11. TOXICOLOGICAL INFORMATION

Ingestion

Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.

Inhalation

There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.

Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful.

Skin

Skin contact with the material may be harmful; systemic effects may result following absorption.

This material can cause inflammation of the skin on contact in some persons.

The material may accentuate any pre-existing dermatitis condition

Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

Eye

This material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Moderate inflammation may be expected with redness; conjunctivitis may occur with prolonged exposure.

Skin corrosion/irritation

Data available to make classification

Serious eye damage/irritation Data available to make classification

Respiratory sensitisation Data available to make classification

Skin Sensitisation Data Not Available to make classification

Germ cell mutagenicity Data Not Available to make classification

Carcinogenicity

Data Not Available to make classification

Reproductive Toxicity

Data Not Available to make classification

STOT-single exposure

Data Not Available to make classification

STOT-repeated exposure

Data Not Available to make classification

Aspiration Hazard

Data Not Available to make classification

Chronic Effects

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

There is some evidence that inhaling this product is more likely to cause a sensitisation reaction in some persons compared to the general population.

Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Sensitisation may give severe responses to very low levels of exposure, i.e. hypersensitivity.

Bisphenol A may have effects similar to female sex hormones and when administered to pregnant women, may damage the foetus. It may also damage male reproductive organs and sperm.

Sensitisation may result in allergic dermatitis responses including rash, itching, hives or swelling of extremities.

Other Information

Epirez General Purpose Epoxy Mortar Binder [133] Compound TOXICITY: Not Available IRRITATION: Not Available

bisphenol A/diglycidyl ether resin, liquid TOXICITY: dermal (rat) LD50: >1200 mg/kg[2] Oral (rat) LD50: >1000 mg/kg[2] IRRITATION: Eye (rabbit): 100mg - Mild

Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

BISPHENOL A/DIGLYCIDYL ETHER RESIN, LIQUID:

The following information refers to contact allergens as a group and may not be specific to this product.

Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions.

The chemical structure of hydroxylated diphenylalkanes or bisphenols consists of two phenolic rings joined together through a bridging carbon. This class of endocrine disruptors that mimic oestrogens is widely used in industry, particularly in plastics

Bisphenol A (BPA) and some related compounds exhibit oestrogenic activity in human breast cancer cell line MCF-7, but there were remarkable differences in activity. Several derivatives of BPA exhibited significant thyroid hormonal activity towards rat pituitary cell line GH3, which releases growth hormone in a thyroid hormone-dependent manner. However, BPA and several other derivatives did not show such activity.

The substance is classified by IARC as Group 3:

NOT classifiable as to its carcinogenicity to humans.

Evidence of carcinogenicity may be inadequate or limited in animal testing.

Animal testing over 13 weeks showed bisphenol A diglycidyl ether (BADGE) caused mild to moderate, chronic, inflammation of the skin.

Reproductive and Developmental Toxicity: Animal testing showed BADGE given over several months caused reduction in body weight but had no reproductive effects.

Cancer-causing potential: It has been concluded that bisphenol A diglycidyl ether cannot be classified with respect to its cancercausing potential in humans.

Genetic toxicity: Laboratory tests on genetic toxicity of BADGE have so far been negative.

Foetoxicity has been observed in animal studies Oral (rabbit, female) NOEL 180 mg/kg (teratogenicity; NOEL (maternal 60 mg/kg

Acute Toxicity: Data Not Available to make classification

12. ECOLOGICAL INFORMATION

Ecotoxicity

NOT AVAILABLE

Ingredient / Endpoint / Test Duration (hr) / Effect / Value / Species / BCF Epirez General Purpose Epoxy Mortar Binder [133] Compound Not Available Not Available Not Available Not Available Available Not Available bisphenol A/diglycidyl ether resin, liquid Not Available Not Available Not Available Not Available Not Available

DO NOT discharge into sewer or waterways. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Persistence and degradability

Ingredient / Persistence: Water/Soil / Persistence: Air bisphenol A/ diglycidyl ether resin, liquid HIGH HIGH

Mobility

Mobility in soil Ingredient: bisphenol A/ diglycidyl ether resin, liquid LOW (KOC = 51.43)

Bioaccumulative Potential

Ingredient: bisphenol A/ diglycidyl ether resin, liquid Bioaccumulation: LOW (LogKOW = 2.6835)

13. DISPOSAL CONSIDERATIONS

Waste Disposal

Recycle wherever possible or consult manufacturer for recycling options. Consult State Land Waste Authority for disposal. Bury or incinerate residue at an approved site. Recycle containers if possible, or dispose of in an authorised landfill.

14. TRANSPORT INFORMATION

Transport Information

Land transport (ADG) UN number: 3082 Packing group: III UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains bisphenol A/ diglycidyl ether resin, liquid) Environmental hazard: No relevant data Transport hazard class(es) Class: 9 Subrisk: Not Applicable Special precautions for user Special provisions: 274 331 335 375 AU01 Limited quantity: 5 L Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in; (a) packagings; (b) IBCs; or (c) any other receptacle not exceeding 500 kg(L). - Australian Special Provisions (SP AU01) - ADG Code 7th Ed.

Air transport (ICAO-IATA / DGR) UN number: 3082 Packing group: III UN proper shipping name: Environmentally hazardous substance, liquid, n.o.s. * (contains bisphenol A/ diglycidyl ether resin, liquid)

Environmental hazard: No relevant data Transport hazard class(es) ICAO/IATA Class: 9 ICAO / IATA Subrisk: Not Applicable ERG Code: 9L Special precautions for user Special provisions: A97 A158 A197 Cargo Only Packing Instructions: 964 Cargo Only Maximum Qty / Pack: 450 L Passenger and Cargo Packing Instructions: 964 Passenger and Cargo Limited Quantity Packing Instructions: Y964 Passenger and Cargo Limited Maximum Qty / Pack: 30 kg G

Sea transport (IMDG-Code / GGVSee) UN number: 3082 Packing group: III UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains bisphenol A/ diglycidyl ether resin, liquid) Environmental hazard: Marine Pollutant Transport hazard class(es) IMDG Class: 9 IMDG Subrisk: Not Applicable Special precautions for user EMS Number: F-A , S-F Special provisions: 274 335 969 Limited Quantities: 5 L

Transport in bulk according to Annex II of MARPOL and the IBC code: Epirez General Purpose Epoxy Mortar Binder [133] Compound

U.N. Number 3082

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(contains bisphenol A/ diglycidyl ether resin, liquid)

Transport hazard class(es) 9 Packing Group III Hazchem Code • 3Z IERG Number 47

15. REGULATORY INFORMATION

Regulatory information

BISPHENOL A/ DIGLYCIDYL ETHER RESIN, LIQUID(25068-38-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS Australia Hazardous Substances Information System - Consolidated Lists Australia Inventory of Chemical Substances (AICS)

National Inventory / Status Australia - AICS Y Canada - DSL Y Canada - NDSL N (bisphenol A/ diglycidyl ether resin, liquid) China - IECSC Y Europe - EINEC / ELINCS / NLP Y Japan - ENCS N (bisphenol A/ diglycidyl ether resin, liquid) Korea - KECI Y New Zealand - NZIOC Y Philippines - PICCS Y USA - TSCA Y

Legend:

Y = All ingredients are on the inventory

N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

Poisons Schedule

S5

16. OTHER INFORMATION

Other Information Version No: 6.1.1.1 Safety Data Sheet according to WHS and ADG requirements S.GHS.AUS.EN

Ingredients with multiple cas numbers Name / CAS No bisphenol A/ diglycidyl ether resin, liquid 25068-38-6, 25085-99-8

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

This SDS has been transcribed into Infosafe GHS format from an original, issued by the manufacturer on the date shown. Any disclaimer by the manufacturer may not be included in the transcription.

END OF SDS

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