

SAFETY DATA SHEET

EPIREZ EPOXY CASTING COMPOUND [8837] COMPOUND

Infosafe No.: HXDO5
ISSUED Date : 27/06/2017
ISSUED by: ITW POLYMERS AND FLUIDS

1. IDENTIFICATION

GHS Product Identifier

EPIREZ EPOXY CASTING COMPOUND [8837] 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

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

Base component of a two-pack epoxy casting compound.

Other Names

Name	Product Code
epoxide resin	

Additional Information

Synonyms: epoxide resin

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Other means of identification: Not Available

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

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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 – Storage

Not Applicable

Precautionary statement – Disposal

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Composition, information on ingredients

Substances

See section below for composition of Mixtures

Ingredients

Name	CAS	Proportion
Bisphenol A/ diglycidyl ether resin, liquid	25068-38-6	10-30 %w
Neopentyl Glycol Diglycidyl Ether	17557-23-2	<10 %w
Other ingredients not contributing to the classification		balance

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

For advice, contact a Poisons Information Centre or a doctor at once.
Urgent hospital treatment is likely to be needed.
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.
Transport to hospital or doctor without delay.

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:
Immediately hold eyelids apart and flush the eye continuously with 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.
Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
Transport to hospital or doctor without delay.
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 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

Hazchem Code

•3Z

Decomposition Temperature

Not Available

Other Information

Advice for firefighters
Fire Fighting
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.

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
nitrogen oxides (NO_x)
other pyrolysis products typical of burning organic material.
Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

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 deg. 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

Control parameters

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

neopentyl glycol diglycidyl ether 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.

Thermal Hazards

Not Available

Body Protection

See Other protection below

Other Information

Other protection

Overalls.

P.V.C. apron.

Barrier cream.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

Paste

Appearance

Grey combustible paste with a mild odour; does not mix with water.

Odour

Not Available

Decomposition Temperature

Not Available

Solubility in Water

Immiscible

pH

pH (as supplied): Not Applicable

pH as a solution (1%): Not available.

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

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

(Water = 1) 1.59 mix

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

If applied to the eyes, this material causes severe eye damage.

Skin corrosion/irritation

Data available to make classification

Serious eye damage/irritation

Data available to make classification

Mutagenicity

Data Not Available to make classification

Respiratory sensitisation

Data available to make classification

Skin Sensitisation

Data 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 has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.

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 Epoxy Casting Compound [8837] 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

neopentyl glycol diglycidyl ether

TOXICITY:

Dermal (rabbit) LD50: 2150 mg/kg[2]

Oral (rat) LD50: 4500 mg/kg[2]

IRRITATION:

Skin (human): Sensitiser [Shell]

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 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 cancer-causing potential in humans.

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

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

NEOPENTYL GLYCOL DIGLYCIDYL ETHER

* Anchor SDS]

BISPHENOL A/DIGLYCIDYL ETHER RESIN, LIQUID & NEOPENTYL GLYCOL DIGLYCIDYL ETHER

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.

Acute Toxicity

Data Not Available to make classification

12. ECOLOGICAL INFORMATION

Ecological information

Toxicity

NOT AVAILABLE

Ingredient / Endpoint / Test Duration (hr) / Effect / Value / Species / BCF

Epirez Epoxy Casting Compound [8837] Compound Not Available Not Available Not Available Not Available Not Available Not Available

bisphenol A/diglycidyl ether resin, liquid Not Available Not Available Not Available Not Available Not Available Not Available

neopentyl glycol diglycidyl ether Not Available Not Available Not Available Not Available Not Available Not Available

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient / Persistence: Water/Soil / Persistence: Air

bisphenol A/ diglycidyl ether resin, liquid HIGH HIGH

neopentyl glycol diglycidyl ether HIGH HIGH

Mobility

Mobility in soil

Ingredient / Mobility

bisphenol A/diglycidyl ether resin, liquid LOW (KOC = 51.43)

neopentyl glycol diglycidyl ether LOW (KOC = 10)

Bioaccumulative Potential

Ingredient / Bioaccumulation

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

neopentyl glycol diglycidyl ether LOW (LogKOW = 0.2342)

13. DISPOSAL CONSIDERATIONS

Waste Disposal

Product / Packaging 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.

Containers may still present a chemical hazard/ danger when empty.

Return to supplier for reuse/ recycling if possible.

Otherwise:

If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.

Where possible retain label warnings and SDS and observe all notices pertaining to the product.

14. TRANSPORT INFORMATION

Transport Information

Labels Required
Marine Pollutant
HAZCHEM: •3Z

Land transport (ADG)
UN number: 3082
Packing group: III
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
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. *
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 Maximum Qty / Pack: 450 L
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.
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
Source / Ingredient / Pollution Category
Epirez Epoxy Casting Compound [8837] Compound

U.N. Number
3082

UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Transport hazard class(es)

9

Packing Group

III

Hazchem Code

•3Z

IERG Number

47

15. REGULATORY INFORMATION

Regulatory information

Safety, health and environmental regulations / legislation specific for the substance or mixture

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)

NEOPENTYL GLYCOL DIGLYCIDYL ETHER(17557-23-2) 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; neopentyl glycol diglycidyl ether)

China - IECSC / Y

Europe - EINEC / ELINCS / NLP / Y

Japan - ENCS / N (bisphenol A/diglycidyl ether resin, liquid; neopentyl glycol diglycidyl ether)

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

Ingredients with multiple cas numbers

Name / CAS No

bisphenol A/ diglycidyl ether resin, liquid 25068-38-6, 25085-99-8

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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