Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

RAMSET EPOXY PASTE 1210 PART A

SYNONYMS

"Product Code: EP1210AL2, EP1210AL10"

PRODUCT USE

■ Used according to manufacturer's directions.

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.

The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing.

SUPPLIER

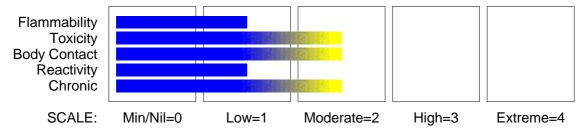
Company: ITW Australia Pty Ltd (Ramset) Address: 1 Ramset Drive Chirnside Park VIC, 3116 Australia Telephone: 1300 780 063 Telephone: +61 3 9726 6222 Emergency Tel:**1800 039 008 (24 hrs)** Email: www.ramset.com.au

Section 2 - HAZARDS IDENTIFICATION

Risk Phrases

STATEMENT OF HAZARDOUS NATURE HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

CHEMWATCH HAZARD RATINGS



RISK

Risk Codes R20/22 R36/38 R43 R66

SAFETY

SAFEIT	
Safety Codes	Safety Phrases
S24	Avoid contact with skin.
S25	 Avoid contact with eyes.
S36	Wear suitable protective clothing.
S37	Wear suitable gloves.
S39	Wear eye/face protection.
S51	 Use only in well ventilated areas.
S09	 Keep container in a well ventilated place.
S401	 To clean the floor and all objects contaminated by this material, use water and detergent.
S13	 Keep away from food, drink and animal feeding stuffs.
S26	 In case of contact with eyes, rinse with plenty of water and contact Doctor or

· Harmful by inhalation and if swallowed.

• May cause SENSITISATION by skin contact.

Repeated exposure may cause skin dryness and cracking.

• Irritating to eyes and skin.

Poisons Information Centre.

continued...

S46

• If swallowed, IMMEDIATELY contact Doctor or Poisons Information Centre. (show this container or label).

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
bisphenol A diglycidyl ether polymer	25085-99-8	30-60
ingredients at levels determined not to be hazardous [Mfr]		balance

Section 4 - FIRST AID MEASURES

SWALLOWED

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.

EYE

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.

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.

INHALED

- 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.

NOTES TO PHYSICIAN

■ for poisons (where specific treatment regime is absent):

BASIC TREATMENT

- Establish a patent airway with suction where necessary.

- Watch for signs of respiratory insufficiency and assist ventilation as necessary.

- Administer oxygen by non-rebreather mask at 10 to 15 L/min.

- Monitor and treat, where necessary, for pulmonary oedema .

Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- Water spray or fog.
- Alcohol stable foam.
- Dry chemical powder.

- Carbon dioxide.

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water courses.
- 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 monoxide (CO), carbon dioxide (CO2), aldehydes, other pyrolysis products typical of burning organic material.

May emit poisonous fumes.

May emit corrosive fumes.

FIRE INCOMPATIBILITY

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

HAZCHEM

None

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

Clean up all spills immediately.

- Avoid contact with skin and eyes.
- Wear impervious gloves and safety goggles.
- Trowel up/scrape up.

MAJOR SPILLS

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- 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.

SUITABLE CONTAINER

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

STORAGE INCOMPATIBILITY

- Avoid strong acids, bases.
- Avoid reaction with oxidising agents.
- 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.

STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

The following materials had no OELs on our records

• bisphenol A diglycidyl ether polymer:

CAS:25085-99-8

MATERIAL DATA

RAMSET EPOXY PASTE 1210 PART A:

■ Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations.

BISPHENOL A DIGLYCIDYL ETHER POLYMER:

For epichlorohydrin

Odour Threshold Value: 0.08 ppm

NOTE: Detector tubes for epichlorohydrin, measuring in excess of 5 ppm, are commercially available.

Exposure at or below the recommended TLV-TWA is thought to minimise the potential for adverse respiratory, liver, kidney effects.

Odour Safety Factor (OSF)

OSF=0.54 (ÉPICHLOROHYDRIN).

No exposure limits set by NOHSC or ACGIH.

PERSONAL PROTECTION

RESPIRATOR

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

EYE

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 lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent].

HANDS/FEET

■ 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.

- 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.

OTHER

Overalls.

- P.V.C. apron.

- Barrier cream.

- Skin cleansing cream.

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.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE White paste.

PHYSICAL PROPERTIES

Does not mix with water. Sinks in water.

State	Non Slump Paste	Molecular Weight	Not Applicable
Melting Range (℃)	Not Available	Viscosity	Not Available
Boiling Range (°C)	Not Available	Solubility in water (g/L)	l mmiscible
Flash Point (°C)	154 (PMCC)	pH (1% solution)	Not Available
Decomposition Temp (°C)	>350	pH (as supplied)	Not Available
Autoignition Temp (°C)	Not Available	Vapour Pressure (kPa)	Not Available
Upper Explosive Limit (%)	Not Available	Specific Gravity (water=1)	1.25
Lower Explosive Limit (%)	Not Available	Relative Vapour Density (air=1)	Not Available
Volatile Component (%vol)	<1	Evaporation Rate	Not Available

Section 10 - STABILITY AND REACTIVITY

CONDITIONS CONTRIBUTING TO INSTABILITY

■ Product is considered stable and hazardous polymerisation will not occur. For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

■ 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.

This ether resin can cause diarrhoea and weight loss. Local irritation, swelling and pain and even death have been recorded. Higher molecular weight resins generally produce lower toxicity.

EYE

This material can cause eye irritation and damage in some persons.

SKIN

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

The material may accentuate any pre-existing dermatitis condition.

Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.

The low molecular bisphenol A diglycidyl ether resins may produce skin redness and swelling with fluid release, crusting and scaling. There may be an initial discrete red lesion, confined to the point of contact, which may persist for 48 hours to 10 days and may give way to a blistering rash with scaling, and itching of the back of the hand, the forearm and face and neck. This lesion may persist for 10-14 days after withdrawal and recur immediately on re-exposure.

Open cuts, abraded or irritated skin should not be exposed to this material.

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.

INHALED

• 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 hazard is increased at higher temperatures.

CHRONIC HEALTH EFFECTS

Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.

Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following.

There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

RAMSET EPOXY PASTE 1210 PART A

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

Based on experience with similar materials, there is a possibility that exposure to the material may reduce fertility in humans at levels which do not cause other toxic effects.

In animal testing, a liquid bisphenol A diglycidyl ether resin caused severe skin irritation when applied daily for 4 hours over 20 days. Animal testing suggests this group of substances may also cause tumours of the skin, kidney, blood and smooth muscle.

TOXICITY AND IRRITATION

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 significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. A weakly sensitising substance which is widely distributed can be a more important allergen than one with stronger sensitising potential with which few individuals come into contact. From a clinical point of view, substances are noteworthy if they produce an allergic test reaction in more than 1% of the persons tested.

Oxiranes (including glycidyl ethers and alkyl oxides, and epoxides) exhibit many common characteristics with respect to animal toxicology. One such oxirane is ethyloxirane; data presented here may be taken as representative. for 1.2-butylene oxide (ethyloxirane):

Ethyloxirane increased the incidence of tumours of the respiratory system in male and female rats exposed via inhalation. Significant increases in nasal papillary adenomas and combined alveolar/bronchiolar adenomas and carcinomas were observed in male rats exposed to 1200 mg/m3 ethyloxirane via inhalation for 103 weeks.

Section 12 - ECOLOGICAL INFORMATION

No data

 Ecotoxicity
 Persistence:
 Persistence: Air
 Bioaccumulation
 Mobility

 Ingredient
 Parsistence:
 Persistence: Air
 Bioaccumulation
 Mobility

 bisphenol A diglycidyl ether
 HIGH
 No Data Available
 LOW
 HIGH

Section 13 - DISPOSAL CONSIDERATIONS

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 MSDS and observe all notices pertaining to the product.
- Where possible retain label warnings and MSDS and observe all notices pertaining to the product
- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- 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.

Section 14 - TRANSPORTATION INFORMATION

HAZCHEM: None (ADG7)

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: ADG7, UN, IATA, IMDG

Section 15 - REGULATORY INFORMATION

Indications of Danger: Xn

Harmful

POISONS SCHEDULE S5

REGULATIONS

Regulations for ingredients

No data for Ramset Epoxy Paste 1210 Part A (CW: 4773-98)

Section 16 - OTHER INFORMATION

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references. A list of reference resources used to assist the committee may be found at: www.chemwatch.net/references.

• The (M)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.

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This is the end of the MSDS.