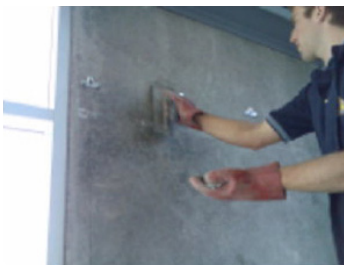
CRETE - PATCH

High Build Polymer Modified Light Weight Repair Mortar.

- Patching repairs and covering metal joining plates in tilt up or pre-cast panel.
- Repairing any damaged concrete or pre-cast or tilt up panels that is non-structural.
- Repairs requiring high build application up to 100mm for vertical applications.
- General high build up repairs when a non-structural repair mortar is required.



MATERIAL SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product Name:	CRETE-PATCH G2
Chemical Name:	Not Applicable
Synonyms:	Not Available
Proper shipping name:	Not Applicable
Chemical formula:	Not Applicable
Other means of identification:	Not Available
CAS number:	Not Applicable

Relevant Identified uses of the Substance or Mixture and uses advised against

Relevant identified uses:	Cementitious repair mortar where a thick layer is required.

Details of the supplier of the safety data sheet

Registered Company Name:	ITLS-TWA Australia (ITLS-TWA Australia)
Address:	250 Princes Highway Dandenong VIC, 3175 Australia
Telephone:	+61 3 9791 8211
Fax:	+61 3 9791 8644
Website:	Not Available
Email:	Not Available

Emergency Telephone Number

Association / Organisation:	Not Available
Emergency telephone numbers:	+61 3 9791 8211
Other emergency telephone numbers:	+61 3 9791 8211

SECTION 2 – HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

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

ChemWatch Hazard Ratings

	Min	Max
Flammability	0	
Toxicity	2	
Body Contact	3	
Reactivity	0	
Chronic	2	

0 = Minimum
1 = Low
2 = Moderate
3 = High
4 = Extreme

Poisons Schedule: None

Risk Phrases [1]

R37/38	Irritating to respiratory system and skin.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R41	Risk of serious damage to eyes.

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

Label Elements

Relevant risk statements are found in section 2.1

Indication(s) of danger: T,Xn

Safety advice:

S01	Keep locked up.	S37	Wear suitable gloves.
S07	Keep container tightly closed.	S38	In case of insufficient ventilation, wear suitable respiratory equipment.
S09	Keep container in a well ventilated place.	S39	Wear eye/face protection.

S13	Keep away from food, drink and animal feeding stuffs.	S40	To clean the floor and all objects contaminated by this material, use water and detergent.
S20	When using do not eat or drink.	S45	In case of accident or if you feel unwell IMMEDIATELY contact Doctor or Poisons Information Centre (show label if possible).
S25	Avoid contact with eyes.	S46	If swallowed, IMMEDIATELY contact Doctor or Poisons Information Center. (Show this container or label).
S26	In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.	S51	Use only in well ventilated areas.
S28	After contact with skin, wash immediately with plenty of	S53	Avoid exposure - obtain special instructions before use.
S29	Do not empty into drains.	S56	Dispose of this material and its container at hazardous or special waste collection point.
S35	This material and its container must be disposed of in a safe way.	S64	If swallowed, rinse mouth with water (only if the person is conscious).
S36	Wear suitable protective clothing.		

Other Hazards

Inhalation and/or ingestion may produce health damage*.

Cumulative effects may result following exposure*.

SECTION 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Substances

See 'Composition on ingredients' in Section 3.2

Mixtures

CAS No	**%[Weight]**	Name
1327-36-2	30-60	ALUMINOSILICATE
65997-15-1	20-40	PORTLAND CEMENT

Note: Manufacturer has supplied full ingredient information to allow CHEMWATCH assessment.

SECTION 4 – FIRST AID MEASURES

Description of First Aid Measures

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.

Skin Contact:

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.

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, without delay.

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.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES

Extinguishing Media	- There is no restriction on the type of extinguisher which may be used. - Use extinguishing media suitable for surrounding area.

Special Hazards Arising from the Substrate or Mixture

Fire Incompatibility:	- None known.

Advice for Firefighters

Fire Fighting:	- Alert Fire Brigade and tell them location and nature of hazard. - Wear breathing apparatus plus protective gloves in the event of a fire. - Prevent, by any means available, spillage from entering drains or water courses. - Use fire fighting procedures suitable for surrounding area.
Fire/Explosion Hazard:	- Non combustible. - Not considered a significant fire risk, however containers may burn. Silicon dioxide (SiO2)May emit poisonous fumes.May emit corrosive fumes.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Minor Spills	- Remove all ignition sources. - Clean up all spills immediately. - Avoid contact with skin and eyes. - Control personal contact with the substance, by using protective equipment.
Major Spills	Moderate hazard. - ***CAUTION:*** Advise personnel in area. - Alert Emergency Services and tell them location and nature of hazard. - Control personal contact by wearing protective clothing.

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

SECTION 7 – HANDLING AND STORAGE

Precautions for Safe Handling

Safe 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.
Other Information	- Store in original containers. - Keep containers securely sealed. - Store in a cool, dry area protected from environmental extremes. - Store away from incompatible materials and foodstuff containers.

Conditions for Safe Storage, Including Any Incompatibilities

Suitable container:	- Polyethylene or polypropylene container. - Check all containers are clearly labelled and free from leaks.

Storage incompatibility:

- Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.
- Avoid contact with copper, aluminium and their alloys.

X : Must not be stored together
0: May be stored together with specific preventions
+: May be stored together

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	portland cement	Portland cement (a)	10 (mgm3)	Not Available	Not Available	American Conference of Governmental Industrial Hygienists (ACGIH)4,5 is the documentation source

Emergency Limits

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
	Crete-Patch G2	Not Available	Not Available	Not Available
Ingredient	Original IDLH		Revised IDLH	
portland cement	N.E.(mgm3)N.E.(ppm)		5,000(mgm3)	

Exposure Controls

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.

PERSONAL PROTECTION

Eye and Face 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 lens or restrictions on use, should be created for each workplace or task.

Skin Protection:

See Hand protection below

Hand Protection:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.
Suitability and durability of glove type is dependent on usage.

Body Protection:	See Other protection below
Other protection:	- Overalls. - P.V.C. Apron. - Barrier cream.
Thermal hazards:	
Recommended material(s):	**Respiratory protection:**

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Appearance	Fine grey powder; Partly mixes with water.		
Physical State	Divided Solid	**Relative Density (Water = 1)**	1.5
Odour	Not Available	**Partition Coefficient N-Octanol / Water**	Not Available
Odour threshold	Not Available	**Auto-Ignition Temperature (°C)**	Not Available
pH (as supplied)	Not Available	**Decomposition Temperature**	Not Available
Melting Point / Freezing Point (°C)	Not Available	**Viscosity (cSt)**	Not Available
Initial Boiling Point and Boiling Range (°C)	Not Available	**Molecular Weight (g/mol)**	Not Applicable
Flash Point (°C)	Not Available	**Taste**	Not Available
Evaporation Rate	Not Available	**Explosive Properties**	Not Available
Flammability	Not Available	**Oxidising Properties**	Not Available
Upper Explosive Limit (%)	Not Available	**Surface Tension (dyn/cm or mN/m)**	Not Available
Lower Explosive Limit (%)	Not Available	**Volatile Component (%vol)**	Not Available
Vapour Pressure (kPa)	Negligible	**Gas Group**	Not Available
Solubility in Water (g/L)	Partly Miscible	**pH as a Solution(1%)**	Not Available
Vapour Density (Air = 1)	Not Available		

SECTION 10 – STABILITY AND REACTIVITY

Reactivity:	See section 7.2
Chemical Stability:	- Presence of incompatible materials. - Product is considered stable. - Hazardous polymerisation will not occur.
Possibility of Hazardous Reactions:	See section 7.2
Conditions to Avoid:	See section 7.2
Incompatible Materials:	See section 7.2
Hazardous Decomposition Products:	See section 5.3

SECTION 11 – TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Inhaled:	Evidence shows, or practical experience predicts, that the material produces irritation of the respiratory system, in a substantial number of individuals, following inhalation. In contrast to most organs, the lung is able to respond to a chemical insult by first removing or neutralising the irritant and then repairing the damage. The repair process, which initially evolved to protect mammalian lungs from foreign matter and antigens, may however, produce further lung damage resulting in the impairment of gas exchange, the primary function of the lungs. Respiratory tract irritation often results in an inflammatory response involving the recruitment and activation of many cell types, mainly derived from the vascular system.
Ingestion:	Considered an unlikely route of entry in commercial/industrial environments Accidental ingestion of the material may be damaging to the health of the individual.

Skin Contact:	Evidence exists, or practical experience predicts, that the material either produces inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant inflammation when applied to the healthy intact skin of animals, for up to four hours, such inflammation being present twenty-four hours or more after the end of the exposure period. Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (nonallergic). The dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to blistering (vesiculation), scaling and thickening of the epidermis. At the microscopic level there may be intercellular oedema of the spongy layer of the skin (spongiosis) and intracellular oedema of the epidermis.
Eye:	Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Serious damage (clear functional disturbance or morphological change which may have toxicological significance) is likely to be caused by repeated or prolonged exposure. As a rule the material produces, or contains a substance which produces severe lesions.

Toxicity		**IRRITATION**
Crete - Patch G2	Not Available	Not Available
Aluminosilicate	Not Available	Not Available
Portland Cement	Not Available	Not Available
Information to allow CHEMWATCH assessment.	Not Available	Not Available
Note: Manufacturer has supplied full ingredient	Not Available	Not Available

Not available. Refer to individual constituents.

ALUMINOSILICATE

No significant acute toxicological data identified in literature search.

PORTLAND CEMENT

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:	Not Available	**Carcinogenicity:**	Not Available
Skin Irritation/Corrosion:	Skin Corrosion/Irritation Category 2	**Reproductivity:**	Not Available
Serious Eye Damage/Irritation:	Serious Eye Damage Category 1	**STOT - Single Exposure:**	Not Available
Respiratory or Skin sensitisation:	Not Available	**STOT - Repeated Exposure:**	STOT - RE Category 2
Mutagenicity:	Not Available	**Aspiration Hazard:**	Not Available

CMR STATUS

SECTION 12 – ECOLOGICAL INFORMATION

Toxicity

DO NOT discharge into sewer or waterways.

Persistence and Degradability		**Bioaccumulative potential**	
Ingredient	**Persistence: Water/Soil**	**Ingredient**	**Bioaccumulation**
Not Available	Not Available	Not Available	Not Available

Mobility in Soil

Ingredient	**Mobility**
Not Available	Not Available

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Product / Packaging disposal:	- Recycle wherever possible or consult manufacturer for recycling options. - Consult State Land Waste Management Authority for disposal. - Bury residue in an authorised landfill. - Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14 – TRANSPORT INFORMATION

Labels Required:

Marine Pollutant: NO

HAZCHEM: None

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 – REGULATORY INFORMATION

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

Aluminosilicate(1327-36-2) is found on the following regulatory lists

"Australia Inventory of Chemical Substances (AICS)","FisherTransport Information","OECD List of High Production Volume (HPV) Chemicals","Australia High Volume Industrial Chemical List (HVICL)","Australia National Pollutant Inventory"

Portland Cement(65997-15-1) is Found on the Following Regulatory Lists

"Australia Inventory of Chemical Substances (AICS)","OECD List of High Production Volume (HPV) Chemicals","Australia High Volume Industrial Chemical List (HVICL)","Australia Exposure Standards"

SECTION 16 – OTHER INFORMATION

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. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

TECHNICAL DATA SHEET- CRETE-PATCH G2
Ultra Light Patching Mortar

DESCRIPTION

CRETE-PATCH G2 is a fine filled, polymer modified, cementitious mortar, specifically formulated for the repair of damaged concrete, covering joiner plates and similar applications. The specially selected cements and polymers contained in CRETE-PATCH G2 provide a mortar with strong adhesion to concrete and masonry substrates with negligible shrinkage. CRETE-PATCH G2 requires only the addition of water.

CRETE-PATCH G2 is 4 hour fire resistant

ADVANTAGES

- Good adhesion
- High build
- Negligible shrinkage
- Requires the addition of water only
- Easy application
- Durable

TYPICAL PROPERTIES

Set Times at 20°C	Initial Final	180 minutes 300 minutes
Set times will be less at increased temperatures.		
Compressive Strength @ 20°C	28 days	20 MPa

APPLICATION INSTRUCTIONS

Preparation

All contacted surfaces must be free of oil, grease or other contamination which may inhibit bond. Any cracked or weakened concrete should be removed and repaired to provide a solid foundation. Scabbling or water blasting should be used to remove laitance and provide a mechanical key.

Mixing

CRETE-PATCH G2 is suitable for mixing using a drill and suitable paddle (spiral type blades) or by hand where only a small quantity is required. Use 5 litres of water per 12 kg bag of CRETE-PATCH G2 to achieve a smooth, soft mortar consistency. Always add the powder to the water while mixing slowly to avoid lumps. Excess water will reduce the final strength and make application of the render more difficult. Only mix that quantity of material that can be used within the set time of the material. Do not attempt to rework any partially set product.

APPLICATION

Apply the mixed CRETE-PATCH G2 to the prepared substrate using a trowel to give the required finished thickness. Ensure proper compaction around reinforcing bars.

CLEAN UP

Clean all equipment with water immediately after use.

ESTIMATING

Packaging

CRETE-PATCH G2 is supplied in 12 kg bags.

Estimating Data

Fresh Wet Density: Approx. 900 kg / m3. (or approx. 0.9 kg / litre). A 12 kg bag of Patching Mortar UL, when mixed with 5 litre of water, will yield approximately 18 litres. By definition, one litre will cover 1 m2 by 1mm thick.

A 12 kg bag of CRETE-PATCH G2 will cover approximately 1.8 m2 at an average thickness of 10mm. One 12 kg bag, when mixed, will cover 15 joining plate recesses of dimensions 200 mm x 200 mm x 30 mm deep.

Manufactured for:
Construction Supply Specialists Pty Ltd
6 Broadfield Rd Broadmeadows Vic 3047 Tel: (03) 93574228
Fax: (03) 93574229
Email: admin@constuctionsupply.com.au