



# FRASER BROWN & STRATMORE LTD.

Products for Concrete and Construction

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## Safety Data Sheet

Hazardous Substance, Non-Dangerous Goods

### 1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: **Plasticast E Epoxy Hardener**

**Recommended use:** Liquid epoxy system for electrical encapsulation. Hardener is part of two-part system including Plasticast E Epoxy Resin

**Supplier:** Fraser Brown & Stratmore Limited  
**Street Address:** 185 Rata Street  
Naenae, Lower Hutt  
New Zealand  
**Telephone:** 0800 835 699  
**Facsimile:** 0800 342 737

**Emergency telephone number:** 0800 POISON / 0800 764766

### 2. HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of ERMA New Zealand



**Signal Word**  
Danger

#### HSNO Hazard Classification

- 6.1D Substances that are acutely toxic.
- 6.3A Substances that are irritating to the skin
- 6.5B Substances that are contact sensitisers
- 6.6B Substances that are suspected human mutagens
- 6.8B Substances that are suspected human reproductive or developmental toxicants
- 6.9A Substances that are toxic to human target organs or systems (single exposure)
- 8.3A Substances that are corrosive to ocular tissue
- 9.1D Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action

#### Hazard Statement(s)

- H303 May be harmful if swallowed
- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H318 Causes serious eye damage
- H332 Harmful If Inhaled
- H341 Suspected of causing genetic defects
- H361 Suspected of damaging fertility or the unborn child

Product name: Plasticast E Epoxy Hardener

Substance Key: FBS011701

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H370 Causes damage to organs  
H402 Harmful to aquatic life

#### Prevention Precautionary Statement(s)

P102 Keep out of reach of children  
P103 Read label before use  
P201 Obtain special instructions before use  
P202 Do not handle until all safety precautions have been read and understood  
P260 Do not breathe dust, fume, gas, mist, vapours or spray  
P264 Wash hands, face and all exposed skin thoroughly after handling  
P270 Do not eat, drink or smoke when using this product  
P271 Use only outdoors or in a well-ventilated area  
P272 Contaminated work clothing should not be allowed out of the workplace  
P273 Avoid release to the environment  
P280 Wear protective clothing, gloves, eye/face protection and suitable respirator

#### Response Precautionary Statement(s)

P101 If medical advice is needed, have product container or label at hand  
P310 Immediately call a POISON CENTER or doctor/physician  
P302+352 IF ON SKIN: Wash with soap and water  
P332+313 If skin irritation occurs: Get medical advice/attention  
P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing  
P362 Take off contaminated clothing and wash before reuse  
P363 Wash contaminated clothing before reuse

#### Storage Precautionary Statement(s)

P405 Store locked up  
P403+233 Store in a well ventilated place. Keep container tightly closed

#### Disposal Precautionary Statement(s)

P501 Dispose of contents/container in accordance with local, regional, national and international regulations

Not classified as Dangerous Goods by the criteria of the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

### 3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO.	PROPORTION
Benzyl alcohol	100-51-6	<7%
Triethylenetetramine	112-24-3	<4%
Phenol	108-95-2	<3%
Ingredients determined to be non-hazardous	-	Balance
		<hr/> 100%

### 4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (pH: 0800 764 766).

**Inhalation:** Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a facemask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage. Seek immediate medical advice.

**Skin contact:** For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance.

**Eye contact:** Immediately irrigate with copious quantities of water for 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre.

**Ingestion:** Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Get to a doctor or hospital quickly.

**PPE for First Aiders:** Wear overalls, chemical goggles and impervious gloves. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using. If risk of inhalation of exists, wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

**Notes to physician:** Treat symptomatically. Effects may be delayed. Can cause corneal burns.

## 5. FIRE-FIGHTING MEASURES

**Specific hazards:** Combustible material.

**Fire fighting further advice:** On burning may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

**Suitable extinguishing media:** If material is involved in a fire use water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

## 6. ACCIDENTAL RELEASE MEASURES

Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. If contamination of sewers or waterways has occurred advise local emergency services.

**Dangerous Goods – Initial Emergency Response Guide No:** Not applicable.

## 7. HANDLING AND STORAGE

**Handling:** Avoid skin and eye contact and inhalation of vapour, mist or aerosols.

**Storage:** Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### National occupational exposure limits:

No value assigned for this specific material by the Department of Labour New Zealand.

However for:

	WES-TWA		WES-STEL		CARCINOGEN CATEGORY	NOTICES
	ppm	mg/m3	ppm	mg/m3		
Phenol	5	19	-	-	-	Sk

As published by the Department of Labour New Zealand.

WES-TWA (Workplace Exposure Standard – Time-weighted Average). The time-weighted average exposure standard designed to protect the worker for the effects of long-term exposure.

WES-Ceiling (Workplace Exposure Standard - Ceiling). A concentration that should not be exceeded during any part of the working day.

'Sk' Notice - absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

**Engineering measures:** Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use with local exhaust ventilation or while wearing appropriate respirator. Keep containers closed when not in use.

**Personal protection equipment:** OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, RESPIRATOR.

Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

**Hygiene measures:** Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid skin and eye contact and inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form / Colour / Odour:** Amber liquid with ammonia odour

**Solubility:** N Av  
**Specific Gravity (20 °C):** 1.00  
**Relative Vapour Density (air=1):** >1

<b>Vapour Pressure (20 °C):</b>	N Av
<b>Flash Point (°C):</b>	>93
<b>Flammability Limits (%):</b>	N Av
<b>Autoignition Temperature (°C):</b>	N Av
<b>Melting Point/Range (°C):</b>	N Av
<b>Boiling Point/Range (°C):</b>	N Av
<b>pH:</b>	>11 (20% dispersion in water)
<b>Viscosity:</b>	N Av
<b>Total VOC (g/Litre):</b>	N Av

(Typical values only - consult specification sheet)  
N Av = Not available                      N App = Not applicable

## 10. STABILITY AND REACTIVITY

**Reactivity:** No reactivity hazards are known for the material.

**Chemical stability:** This material is thermally stable when stored and used as directed.

**Hazardous reactions:** No known hazardous reactions.

**Conditions to avoid:** Elevated temperatures and sources of ignition.

**Incompatible materials:** Oxidising agents and alkalis.

**Hazardous decomposition products:** Oxides of carbon and nitrogen, smoke and other toxic fumes.

## 11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

### Acute Effects

**Inhalation:** Harmful if inhaled. Material may be an irritant to mucous membranes and respiratory tract.

**Skin contact:** Contact with skin will result in irritation. A skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

**Ingestion:** Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.

**Eye contact:** A severe eye irritant. Corrosive to eyes: contact can cause corneal burns. Contamination of eyes can result in permanent injury.

### Acute toxicity

**Inhalation:** This material has been classified as a 6.1D hazardous substance. Acute toxicity estimate (based on ingredients): 1 - 5 mg/L

Phenol LC<sub>50</sub> (mice): 0.117 mg/L

**Skin contact:** This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

Phenol LD<sub>50</sub> (rat): 525 mg/Kg

**Ingestion:** This material has been classified as a 6.1E hazardous substance. Acute toxicity estimate (based on ingredients): 2,000 – 5,000 mg/Kg

Phenol LD<sub>50</sub> (cat): 100 mg/Kg

**Corrosion/Irritancy:** Inhalation: this material has been classified as not corrosive or irritating by inhalation. Eye: this material has been classified as a 8.3A hazardous substance. Skin: this material has been classified as a 6.3A hazardous substance.

**Sensitisation:** Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as a 6.5B hazardous substance.

**Aspiration hazard:** This material has been classified as non-hazardous.

**Specific target organ toxicity (single exposure):** This material has been classified as a 6.9A hazardous material. Exposure via oral and dermal may result in systemic effects (beside possible local effects) like cardiac dysrhythmia, metabolic acidosis, hyperventilation, convulsions, acute renal failure, methaemoglobinaemia, cardiovascular shock, coma and death; first symptoms of systemic intoxication observable within a few minutes.

#### Chronic Toxicity

**Mutagenicity:** This material has been classified as a 6.6B hazardous substance.

**Carcinogenicity:** This material has been classified as non-hazardous.

**Reproductive toxicity (including via lactation):** This material has been classified as a 6.8B hazardous substance.

**Specific target organ toxicity (repeat exposure):** This material has been classified as a 6.9A hazardous material. Exposure via oral and dermal may result in systemic effects (beside possible local effects) like cardiac dysrhythmia, metabolic acidosis, hyperventilation, convulsions, acute renal failure, methaemoglobinaemia, cardiovascular shock, coma and death; first symptoms of systemic intoxication observable within a few minutes.

## 12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

**Acute aquatic hazard:** Acute toxicity estimate (based on ingredients): 1 - 100 mg/L

**Long-term aquatic hazard:** Toxicity estimate (based on ingredients): >100 mg/L

**Ecotoxicity:** Toxic to terrestrial species.

**Persistence and degradability:** No information available.

**Bioaccumulative potential:** No information available.

**Mobility:** No information available.

## 13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

## 14. TRANSPORT INFORMATION

### ROAD AND RAIL TRANSPORT

Not classified as Dangerous Goods by the criteria of the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

### MARINE TRANSPORT

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

### AIR TRANSPORT

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

## 15. REGULATORY INFORMATION

**ERMA Group Standard:** Construction Products (Subsidiary Hazard) Group Standard 2006; HSR002544

### This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances)  
The Stockholm Convention (Persistent Organic Pollutants)  
The Rotterdam Convention (Prior Informed Consent)  
International Convention for the Prevention of Pollution from Ships (MARPOL)

### This material is subject to the following international agreements:

Basel Convention (Hazardous Waste)

- Wastes from production, formulation and use of resins, latex, plasticizers, glues/adhesives

## 16. OTHER INFORMATION

### Literary reference

This SDS has been prepared by Chemical Data Services Pty Ltd (chemdata.com.au) on behalf of its client.

Reason(s) For Issue: Revised

Material Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since Fraser Brown & Stratmore Limited cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.