FRASER BROWN & STRATMORE LTD.
Products for Concrete and Construction
185 Rata Street, P O Box 35 136, Naenae, Lower Hutt, New Zealand.
Telephone (64 4) 567 8436, Fax (64 4) 567 7232, Email fbs@fbsltd.co.nz, Web www.fbsltd.co.nz

MATERIAL SAFETY DATA SHEET

IDENTIFICATION

Product: **EPAR 802 EPOXY HARDENER**

Recommended Uses: Epoxy paste – adhesive and repair of concrete. Hardener is part of two-part system including EPAR 802 Epoxy Resin.

Company Details (NZ Manufacturer)

Company:	Fraser Brown & Stratmore Limited
Address:	185 Rata Street, Naenae, Lower Hutt
Contact Details:	Ph: 0800 835 699, Fax: 0800 342 737
Emergency Contact:	Poisons & Hazardous Chemicals: 0800 POISON / 0800 764766

HAZARDS IDENTIFICATION

The primary exposure route for this product is through prolonged and/or continuous skin contact.

Hazard information:

Causes mild skin irritation.
Causes eye irritation.
Harmful to aquatic life.
May be harmful if swallowed.
May cause skin sensitisation with prolonged exposure to skin.

COMPOSITION

Name	CAS Number	Content
Tetraethylenepentamine	112-57-2	<2.5%
Teta, reaction products with phenol/formaldehyde	32610-77-8	<1.3%
Phenol	108-95-2	<0.5%
Triethylenetetramine	112-24-3	<0.5%
Non-hazardous ingredients	—	To 100%

FIRST AID MEASURES

FIRST AID:

INHALATION	Remove to fresh air if necessary. If breathing has stopped or is laboured, give assisted respirations. Get medical advice/attention.
SWALLOWED	**DO NOT** induce vomiting. In the unlikely event of ingestion, obtain medical attention immediately. Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician if feeling unwell.
EYE CONTACT	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
SKIN CONTACT	Remove contaminated clothing. Wash hands off with plenty of soap and water. Apply hand cream. If skin irritation occurs: Get medical advice/attention.

Repeated and/or prolonged unprotected skin contact may cause skin sensitisation. If skin sensitisation has developed and a causal relationship has been confirmed, further exposure should not be allowed.

FIRE FIGHTING MEASURES

FLASH POINT	Not determined (> 200 degrees C)
UNUSUAL OR EXPLOSIVE HAZARDS:	None

SPECIAL FIREFIGHTING PROCEDURES AND UNUSUAL FIRE AND EXPLOSION HAZARDS

None known.

EXTINGUISHING MEDIA

Water spray, foam, carbon dioxide, dry chemical, dry sand, earth. Do not use water jet.

HAZARDOUS COMBUSTION PRODUCTS

May generate nitrogen oxides and carbon oxides. Burning produces obnoxious and toxic fumes.

ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN WHEN MATERIAL IS SPILLED OR RELEASED

In case of a large accidental spill, protective clothing such as overalls should be worn. Wear Neoprene rubber gloves, impervious to chemicals, preferably long, for prolonged contact. Wear rubber boots.

As this material is a mortar, scrape up excess material and package for reuse or disposal. Soak up residue with an absorbent material such as sand, earth, sweeping compound or other absorbent material. Package absorbent material or solid product in steel or plastic containers that are in good condition.

Thoroughly clean area where spill occurred using water and detergent. Retain washings as contaminated waste. Do not allow material to enter drains or surface water.

ENVIRONMENTAL INFORMATION

Prevent contamination of soil and water. Product is not readily biodegradable and may be classified as toxic to aquatic organisms. Product will not float on water.

HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Read product label before use. Avoid contact with skin and eyes. Use with adequate ventilation. Wash hands thoroughly after handling.

CONDITIONS FOR SAFE STORAGE

Keep container closed when not in use.

Keep out of reach of children.

Store in a cool location (15-25 degrees C) away from incompatible materials. Keep container tightly closed when not being used.

MATERIALS TO AVOID

Avoid uncontrolled reaction with epoxy resins, strong oxidising agents, organic acids, mineral acids.

EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE STANDARDS

TWA	None Established
STEL	None Established

ENGINEERING CONTROLS

Local exhaust is preferred to keep exposure limits low. Mechanical area wide ventilation is acceptable. If this product is to be used in an area of poor ventilation, a full or half facemask, with a filter suitable to provide protection from organic gases and vapours, should be worn.

Avoid breathing dust if this product (when mixed with resin) is to be cut or sanded.

PROTECTIVE GLOVES & CLOTHING

Protective clothing such as overalls should be worn. Wear butyl rubber gloves, impervious to chemicals, preferably long, for prolonged contact. Wear rubber boots. Remove and launder clothing soaked or soiled with this material before re-use.

EYE PROTECTION

Not necessary under normal use. May be required if this product once mixed with EPAR 802 Resin is applied under pressure.

OTHER PROTECTION

Use barrier cream on exposed areas of skin. Avoid skin prolonged contact. If skin sensitisation has developed and a causal relationship has been confirmed, further exposure should be avoided.

PHYSICAL AND CHEMICAL PROPERTIES

VAPOR DENSITY (Air = 1)	Not determined
BOILING POINT IN DEGS C	>200
SPECIFIC GRAVITY	1.75
VISCOSITY	Paste
APPEARANCE AND ODOUR	Light grey smooth paste with amine (ammonia) odour

STABILITY AND REACTIVITY

STABILITY

Stable.

MATERIALS TO AVOID

Strong oxidizing agents, strong acids and strong bases.

HAZARDOUS REACTIONS

Stable under normal use conditions. . Reacts with strong oxidising agents, strong acids and bases.

TOXICOLOGICAL INFORMATION

INGESTION	Not expected to cause adverse health effects for small amounts.
	LD50 rat Dose: >5,000mg/kg for Tetraethylenepentamine
INHALATION	Not generally irritating. May become irritating if heated or used in poorly ventilated areas.
	Avoid breathing dust if this product (when mixed with resin) is to be cut or sanded. Use adequate ventilation and/or protective equipment.
CONTACT	May cause skin problems following repeated or prolonged exposure. Eye irritant. Can cause skin sensitisation following repeated/prolonged exposure.
CARCINOGENICITY	Not a carcinogen.
MUTAGENICITY	Not a mutagenic hazard.

CHRONIC HEALTH EFFECTS

Repeated or prolonged skin contact may result in allergic contact dermatitis.

ECOLOGICAL INFORMATION

Fish toxicity	No data
Algae toxicity	No data
OECD Biological degradation	Unknown.
Sewerage treatment	Unknown.

Note: In manufactured form (mortar), EPAR 802 Hardener will not readily disperse into water and therefore any toxic effects will be minimised over the short-term.

DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Recover and recycle if possible. Clean container thoroughly, wash with detergent and water. Recycle if possible.

Waste material can be disposed of by incineration (preferably at high temperature) by an approved agent according to local regulations. Alternatively, mix waste material with EPAR 802 Resin and allow to cure. Dispose of hardened material in ordinary waste. Dispose of in accordance with local rules. Be aware that local requirements may differ widely depending on location and may in many cases be different from national rules.

TRANSPORT INFORMATION

UN NUMBER	Not regulated
HAZARD CLASS:	Non Hazardous
NZ DANGEROUS GOOD CLASS & SUBSIDIARY RISK	Not Regulated
PACKAGING GROUP	III
PROPER SHIPPING NAME	No Applicable

REGULATORY INFORMATION

HSNO Approval number:	HSR002670
Group Standard:	Surface Coatings and Colourants (Subsidiary Hazard) 2006
HSNO Substance classification	6.1E, 6.3B, 6.4A

OTHER INFORMATION

Date of Issue:	May 2008
Supercedes Date:	March 2007

Legend

Warning

Information in this MSDS relates to EPAR 802 Hardener in uncured state only. Cured state is inert and non-hazardous (avoid breathing dust if sanded or cut).

IMPORTANT NOTICE:

The above information is intended for the assistance of end users with respect to health, safety and environmental requirements. Each user should read the MSDS and consider the data in context with how the product will be used/applied. It is based on data and information believed to be reliable but because the conditions under which, and the materials with which our products are used, are beyond our control this information must not be regarded as amounting to legal warranty or as involving any liability on us. No guarantee is expressed or implied regarding the accuracy of the data.