



FRASER BROWN & STRATMORE LTD.

Products for Concrete and Construction

185 Rata Street, P O Box 35 136, Naenae, Lower Hutt, New Zealand.

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MATERIAL SAFETY DATA SHEET

IDENTIFICATION

Product: EPAR HPN Epoxy RESIN

Recommended Uses: General purpose epoxy adhesive resin for concrete and construction work. Resin is part of two-part system including EPAR HPN Hardener (curing agent).

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

May cause an allergic skin reaction

Harmful to aquatic life with long-lasting aquatic effects



COMPOSITION

Name	CAS Number	Content
Reaction product: Bisphenol-A (epoxy resin)	25068-38-6	23 – 26%
Epichlorohydrin	2210-79-9	6.5 – 9.5%
Silicon Dioxide	—	< 16%
Non-hazardous ingredients	—	To 100%

FIRST AID MEASURES

FIRST AID:

INHALATION

No specific measures. Remove to fresh air if necessary.

SWALLOWED

DO NOT induce vomiting. In the unlikely event of ingestion, obtain medical attention immediately.

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. **IF ON SKIN:** Wash 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 (very high)

UNUSUAL OR EXPLOSIVE HAZARDS: None

SPECIAL FIREFIGHTING PROCEDURES AND UNUSUAL FIRE AND EXPLOSION HAZARDS

Not classified as flammable, but will burn.

EXTINGUISHING MEDIA

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

HAZARDOUS COMBUSTION PRODUCTS

Unknown. Carbon monoxide may be evolved if incomplete combustion occurs.

ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN WHEN MATERIAL IS SPILLED OR RELEASED

In case of 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 paste, 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 has the potential to bioaccumulate. Product will sink in water.

HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Avoid contact with skin and eyes.

For larger packs, exercise care when lifting due to the weight.

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 hardeners, strong oxidising agents and caustic soda.

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 hardener) is to be cut or sanded.

PROTECTIVE GLOVES & CLOTHING

Protective clothing such as overalls should be worn. Wear nitrile or 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. Contaminated work clothing should not be allowed out of the workplace.

EYE PROTECTION

Not necessary under normal use.

OTHER PROTECTION

Use barrier cream on exposed areas of skin. Avoid skin 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	Not determined
SPECIFIC GRAVITY	~1.75
pH	~7
VISCOSITY	Thick paste
APPEARANCE AND ODOUR	White thick paste with slight odour

STABILITY AND REACTIVITY

STABILITY

Stable. Reacts with strong oxidising agents.

MATERIALS TO AVOID

Strong oxidizing agents and caustic soda.

HAZARDOUS COMBUSTION PRODUCTS

Will not form hazardous decomposition products during normal storage.

HAZARDOUS REACTIONS

Stable under normal use conditions. Reacts with strong oxidising agents. Polymerises with amines (EPAR HPN hardener), mercaptans and Lewis acids at ambient temperatures and above.

TOXICOLOGICAL INFORMATION

INGESTION	Not expected to cause adverse health effects for small amounts. Large amounts may cause nausea and vomiting. Low toxicity, LD50 >2000 mg/kg.
INHALATION	Inhalation of vapours or mists may be 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. Keep below Worksafe Exposure Standard for inspirable dusts of 10mg/m ³ .
CONTACT	May cause skin problems following repeated or prolonged exposure. Slightly irritating to the eye. Slightly irritating to skin. Low toxicity, LD50 > 2000mg/kg. Can cause skin sensitisation following repeated/prolonged exposure.
CARCINOGENICITY	Not a carcinogen.
MUTAGENICITY	Not considered to be a mutagenic hazard.
CHRONIC HEALTH EFFECTS	Repeated or prolonged skin contact may result in allergic contact dermatitis.

ECOLOGICAL INFORMATION

Fish toxicity	Practically non toxic, 100 < LC/EC/IC 50 <= 1000 mg/l
Algae toxicity	Toxic, 1 < LC/EC/IC 50 <= 10 mg/l
Invertebrates	Toxic, 1 < LC/EC/IC 50 <= 10 mg/l
Sewerage treatment	No data.

Note: Toxic effects based on raw material data. In manufactured form, EPAR HPN Resin will not readily disperse into water and therefore toxic effects will be minimised over the short-term.

DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Recover and recycle if possible. Do not reuse empty containers.

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 HPN Hardener 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	FREE
HAZARD CLASS:	Non hazardous
NZ DANGEROUS GOOD CLASS & SUBSIDIARY RISK	Not applicable
PACKAGING GROUP	Not applicable
PROPER SHIPPING NAME	Not applicable

REGULATORY INFORMATION

HSNO Approval number:	HSR002670
Group Standard:	Surface Coatings and Colourants (Subsidiary Hazard) 2006
HSNO Substance classification	6.3B, 6.4A, 6.5B, 9.1C
Approved Handler:	An approved handler is not required for this product.
HSNO Controls	The following site and storage conditions trigger quantities are applicable for this product:

Requirement	Trigger Quantity (quantities greater than the amount listed trigger the requirement)
Response plans and secondary containment	1,000 kg
Signage	1,000 kg

OTHER INFORMATION

Date of Issue:	November 2008
Supersedes Date:	August 2006

Legend



Warning

Information in this MSDS relates to EPAR HPN Resin in uncured state only. Cured state is inert and non-hazardous.

IMPORTANT NOTICE:

The above recommendations are intended for the assistance of end users. They are based on our experience and judgement and data believed to be reliable from raw material suppliers but because the conditions under which, and the materials with which our products are used, are beyond our control our recommendations must not be regarded as amounting to legal warranty or as involving any liability on us.