



FRASER BROWN & STRATMORE LTD.

Products for Concrete and Construction

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PRODUCT SAFETY DATA SHEET

IDENTIFICATION

Product: **EPAR 123/226/S EPOXY HARDENER**
Recommended Uses: Epoxy liquid –repair of concrete (123), concrete coating (226) and grout/joint filler (S). Hardener is part of two-part system including EPAR 123 or EPAR 226 or EPAR S 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 skin or eye contact and inhalation of vapours.

Hazard information:



Causes skin burns.

Causes serious eye damage.



Harmful if swallowed. Harmful by inhalation.

May cause skin sensitisation with prolonged exposure to skin.

Harmful to aquatic life.

COMPOSITION

Name	CAS Number	Content
ISOPHORONEDIAMINE	2855-13-2	60 – 70%
BENZYL ALCOHOL	100-51-6	20 – 25%
SALICYLIC ACID	69-72-7	5 – 10%

FIRST AID MEASURES

FIRST AID:

INHALATION

Use in well ventilated areas. Remove to fresh air if necessary. In case of irritation of respiratory system or mucous membranes, seek medical advice/attention. If breathing has stopped or is laboured, give assisted respirations. Get immediate medical advice/attention.

SWALLOWED

DO NOT induce vomiting. Rinse out mouth and drink plenty of water and obtain medical attention immediately. Never give anything by mouth to an unconscious person.

EYE CONTACT

IF IN EYES: Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

SKIN CONTACT

Take off contaminated clothing and wash before re-use. Wash off immediately 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 (expected to be > 110 degrees C)
UNUSUAL OR EXPLOSIVE HAZARDS:	Combustible. Keep away from sources of ignition. Vapours may form flammable mixtures in air, especially when exposed to flame or heat.

SPECIAL FIREFIGHTING PROCEDURES AND UNUSUAL FIRE AND EXPLOSION HAZARDS

Will burn if exposed to fire. Fire fighters to wear full protective clothing as per personal protection section.

EXTINGUISHING MEDIA

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

HAZARDOUS COMBUSTION PRODUCTS

Thermal decomposition or burning may release nitrogen and carbon oxides, nitrogen and other toxic gases or vapours.

ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN WHEN MATERIAL IS SPILLED OR RELEASED

In case spill, protective clothing such as overalls should be worn. Wear Neoprene rubber gloves, impervious to chemicals, preferably long. Wear rubber boots.

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 is classified as toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. Do not allow to enter drains, sewers or waterways.

HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Read product label before use. Avoid all contact with skin and eyes. Use only in areas with adequate ventilation and wear proper protective clothing and gear. Avoid inhalation of fumes and vapours. Wash hands thoroughly after handling. Do not smoke, drink or eat when handling this product.

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. Store locked up.

MATERIALS TO AVOID

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

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 (amine 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 PVC or similar plastic gloves to NZ/AS2161. Wear rubber boots. Remove and launder clothing soaked or soiled with this material before re-use. Do not allow contaminated work clothing out of the workplace.

EYE PROTECTION

Tightly fitting safety goggles, well fitting safety glasses or face shield.

OTHER PROTECTION

Avoid skin contact. If skin sensitisation has developed and a causal relationship has been confirmed, further exposure should be avoided.

OTHER PRECAUTIONS

Causes eye and skin burns. Harmful and corrosive if swallowed. Avoid skin contact. Use only in areas with adequate ventilation. Avoid breathing vapour. Always wear safety gear when using this product. Wash hands after use. Do not smoke drink or eat while handling this product. Observe usual precautions when handling chemicals.

PHYSICAL AND CHEMICAL PROPERTIES

VAPOR DENSITY (Air = 1)	Not determined
BOILING POINT IN DEGS C	>200 (based on component 1)
SPECIFIC GRAVITY	0.924
VISCOSITY	Liquid
APPEARANCE AND ODOUR	Mobile clear/amber liquid with amine (ammonia) odour

STABILITY AND REACTIVITY

STABILITY

Stable.

MATERIALS TO AVOID

Strong oxidizing agents, strong acids and strong bases. Uncontrolled reactions with epoxy resins (outside of the use of this product with the associated resin).

HAZARDOUS REACTIONS

Stable under normal use conditions.

TOXICOLOGICAL INFORMATION

INGESTION	Harmful if swallowed. LD50 rat Dose: 1030mg/kg for ISOPHORONEDIAMINE
INHALATION	High vapour concentrations are likely to cause irritation to the eyes, mucous membranes and respiratory tract. Harmful by inhalation. Do not breathe vapours. 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 Standards for inspirable dusts of 10mg/m ³ .
CONTACT	Corrosive to skin. May cause local discomfort or pain, redness and swelling following contact. Severe eye irritant. Can cause severe eye irritation/burns, experienced as discomfort or pain, excess blinking and tear production, marked excess redness. May cause permanent damage to the eye. Can cause skin sensitisation following repeated or 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 or sensitisation.

ECOLOGICAL INFORMATION

Fish toxicity	No data
Algae toxicity	No data
OECD Biological degradation	No data, but not expected to be readily biodegradable.
Sewerage treatment	3-AMINOETHYL-3,5,5-TRIMETHYLCYCLOHEXYL AMINE is an alkali and should be neutralised before discharging into effluent treatment plants.

Avoid subsoil penetration. Do not discharge into drains, sewers or waterways.

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 123/226/S 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	2735
NZ DANGEROUS GOOD CLASS & SUBSIDIARY RISK	8
HAZCHEM:	2X
PACKAGING GROUP	II
PROPER SHIPPING NAME	AMINES. LIQUID, CORROSIVE, N.O.S. (Contains ISOPHORONEDIAMINE).

REGULATORY INFORMATION

HSNO Approval number:	HSR002658
Group Standard:	Surface Coatings and Colourants (Subsidiary Hazard) 2006
HSNO Substance classification	6.1D, 6.5B, 8.2C, 8.3A, 9.3B
Approved Handler:	An approved handler is not required for this product.

OTHER INFORMATION

Date of Issue:	July 2011
Supersedes Date:	November 2008

Legend



Warning



Danger - Corrosive

Information in this MSDS relates to EPAR 123/226/S Hardener in uncured (not mixed with epoxy resin) state only. Cured state is inert and considered non-hazardous under normal application conditions (avoid breathing dust if sanded/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.