



# 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

### 1. IDENTIFICATION

**Product:** **FRACURE**

**Recommended Uses:** Curing compound for concrete.

**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

### 2. HAZARDS IDENTIFICATION

The primary exposure route for this product is through inhalation of vapours or spray mists.

#### Hazard information:

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



#### Signal Word

Warning

#### HSNO Hazard Classification

3.1C	Flammable liquids
6.1E	Substances that are acutely toxic.
6.3B	Substances that are mildly irritating to the skin
6.8B	Substances that are suspected human reproductive or developmental toxicants
6.9B	Substances that are harmful to human target organs or systems (repeated exposure)
9.1B	Substances that are ecotoxic in the aquatic environment

#### Hazard Statement(s)

H226	Flammable liquid and vapour
H303	May be harmful if swallowed
H316	Causes mild skin irritation
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects

#### 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
P210	Keep away from all sources of ignition - No smoking

P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical, ventilating, lighting and all other equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P260	Do not breathe mist/vapours/spray
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
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P308+313	IF exposed or concerned: Get medical advice/attention
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P332+313	If skin irritation occurs: Get medical advice/attention

#### Storage Precautionary Statement(s)

P405	Store locked up
P403+235	Store in a well ventilated place. Keep cool

#### Disposal Precautionary Statement(s)

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

Classified as Dangerous Goods by the criteria of the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Class: 3 Flammable Liquid

### 3. COMPOSITION

Name	CAS Number	Content
1,2,4 Trimethyl benzene	95-93-6	1.7 - 8%
1,3,5-Trimethyl benzene	108-67-8	0.5 – 2.6%
Ethylbenzene	100-41-4	<= 0.1%
White spirit	8052-41-3	>60%
Ingredients determined to be non-hazardous	—	Balance

### 4. FIRST AID MEASURES

#### FIRST AID:

INHALATION	Move victim to fresh air if necessary. Begin artificial respiration if breathing has stopped. If rapid recovery does not occur, seek immediate medical advice.
INGESTION	If swallowed: <b>DO NOT</b> induce vomiting. Give a glass of water. Begin artificial respiration if the victim is not breathing – use mouth to nose and obtain medical attention immediately. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
EYE CONTACT	Immediately flush eye thoroughly with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Rest eyes for 30 minutes. If irritation, redness, burning, blurred vision persist, seek medical attention.
SKIN CONTACT	Remove contaminated clothing. Wash off with plenty of soap and water. If persistent irritation occurs, seek medical attention or contact National Poisons Centre on 0800 764 766.

Advice to Physician

Treat according to symptoms. Gastric lavage with protected airway, administration of activated charcoal. Do not wait for symptoms to develop. Dermatitis may result from prolonged or repeated exposure. Causes central nervous system depression at high vapour concentrations.

## 5. FIRE FIGHTING MEASURES

FLASH POINT 36 degrees C

UNUSUAL OR EXPLOSIVE HAZARDS: **Flammable/combustible liquid & vapour.** Product is flammable/combustible and will burn when exposed to heat, spark or flame. Use self-contained breathing apparatus and protective clothing. Do not direct a solid stream of water or foam into hot, burning pools; this may cause frothing and increase fire intensity. Fight fire from a safe distance. When mixed with air and exposed to a source of ignition, vapours may burn or explode. Flammable vapours are heavier than air and may travel long distances before igniting/flashing back to the vapour source. Liquid is immiscible with water and will float on water.

### SPECIAL FIREFIGHTING PROCEDURES AND UNUSUAL FIRE AND EXPLOSION HAZARDS

Shut off product that may "fuel" a fire if safe to do so. Prevent extinguishing media from escaping into drains and waterways.

### EXTINGUISHING MEDIA

Dry chemical or foam.

### HAZARDOUS COMBUSTION PRODUCTS

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

## 6. 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.

Prevent liquid from escaping to drains and waterways. Contain leaking packaging in a containment drum or area. Prevent vapours from building up in a confined area.

Eliminate all sources of ignition. Shut off source of the spill if safe to do so. Depending on amount spilled, warn occupants of downwind areas of possible fire and explosion hazard. Keep public away from the area. Advise authorities if the liquid has entered a watercourse or sewer or has contaminated soil or vegetation.

If the spill is into water, and of a large quantity, notify the relevant authority.

Product reacts with water and forms a small amount of methanol through hydrolysis. If spill is into water in a confined space, wear suitable breathing apparatus.

If on land, contain the spilled liquid with sand or earth. If a large quantity has been spilled, recover by pumping (use a hand pump) or use a suitable absorbent material. If into water, remove the product by skimming or with a suitable absorbent material. Do not flush away with water.

Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

### ENVIRONMENTAL INFORMATION

Prevent contamination of soil and water. Product will rapidly degrade in air. Product is expected to be removed in wastewater treatment. Product is expected to biodegrade rapidly. Product will float on water.

If material is allowed to dry on dense substrates, a varnish-like film will form. This film will dust off with exposure to weather after 4 – 8 weeks and is harmless to the environment.

## 7. HANDLING AND STORAGE

### PRECAUTIONS FOR SAFE HANDLING

Product is flammable. Do not open or store near open flame, sources of heat or ignition. No smoking. Remove all ignition sources. Keep container closed when not in use. Open slowly to control possible pressure increase. Use grounding leads to avoid discharge. Avoid contact with skin and eyes and clothing. Use with adequate ventilation; avoid breathing of vapours, especially if product is sprayed – wear appropriate vapour mask. Avoid fine spray mists.

An approved handler is not required for this product.

## CONDITIONS FOR SAFE STORAGE

Keep out of reach of children.

Store in a cool location (15-25 degrees C) away from incompatible materials, sources of ignition and direct sunlight. Keep containers tightly closed when not being used.

## INCOMPATIBLE MATERIALS

Natural rubber, Butyl Rubber, EPDM, Polystyrene.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### EXPOSURE STANDARDS

TWA (Mineral spirits)	350 mg/m <sup>3</sup> highest allowable exposure concentration in an 8-hour day for a 5-day working week.
TWA (Ethylbenzene)	100 ppm
STEL (Ethylbenzene)	125 ppm

### 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 should be worn. Select a filter suitable for organic gases and vapours (boiling point >65°C) meeting EN141. Where air-filtering respirators are unsuitable (airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.

### PROTECTIVE GLOVES & CLOTHING

Protective clothing such as overalls should be worn. Wear nitrile 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

Wear safety glasses.

### OTHER PROTECTION

Avoid skin contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOUR	Clear, colourless liquid.
VAPOR DENSITY (Air = 1)	> 1
BOILING POINT IN DEGS C	>140 degrees C
FLASH POINT	36 degrees C
SPECIFIC GRAVITY	0.78.
AUTOIGNITION TEMPERATURE	>200 degrees C
EXPLOSIVE LIMITS IN AIR	0.5 – 0.7
PERCENT VOLATILES	100%
SOLUBILITY WITH WATER	Nil
SATURATED VAPOUR CONCENTRATION (in air)	21 g/m <sup>3</sup> (estimated value based on white spirit)

## 10. STABILITY AND REACTIVITY

### STABILITY

Stable.

### CONDITIONS TO AVOID

Open flames, sources of heat and ignition. No smoking. Take precautionary measures against static discharges. Earth all equipment. Do not use compressed air for discharging or handling. Avoid contact with skin, eyes and clothing. Do not breathe vapour.

### HAZARDOUS COMBUSTION PRODUCTS

No decomposition products except on burning – see "Fire Fighting Measures"

## HAZARDOUS REACTIONS

Stable under normal use conditions. Reacts with strong oxidising agents, mineral acids, halogenated organic compounds and peroxides.

## 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 Oral Toxicity	This material has been classified as a 6.1E hazardous substance. Ingestion will result in headaches, nausea, dizziness and tracheal burning. Small amounts of liquid aspirated into lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary oedema which can be fatal.
Acute Inhalation Toxicity	This material has been classified as non-hazardous. Low Toxicity: LC50 greater than near-saturated vapour concentration /4 hours (rat). Irritating to the respiratory tract. Exposure to large concentrations over an extended time will result in muscle weakness, tingling in hands and feet, blurred vision, headaches, nausea, loss of appetite and possible loss of consciousness. Use adequate ventilation and/or protective equipment. Keep below Worksafe Exposure Standard.
Contact	This material has been classified as non-hazardous. May cause skin problems following repeated or prolonged exposure. Irritating to the eyes. Irritating to skin following prolonged exposure. Prolonged or repeated contact may cause defatting of the skin that can lead to dermatitis. Wear gloves and overalls and eye protection when applying.
Corrosion/Irritancy	Eye: this material has been classified as not corrosive or irritating to eyes. Skin: this material has been classified as not corrosive or irritating to skin.
Sensitisation	Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.
Aspiration hazard	This material has been classified as non-hazardous.
Specific target organ toxicity (single exposure):	This material has been classified as non-hazardous.
Chronic Toxicity	
Mutagenicity	This material has been classified as non-hazardous.
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 6.9B hazardous substance. Exposure via inhalation may result in adverse effects to blood, thymus and liver.

## 12. ECOLOGICAL INFORMATION

Fish toxicity	Harmful, LC <sub>50</sub> (96hr) = 10 - 100 mg/l
Algae toxicity	Expected to be toxic, (toxicity threshold 7 – 8 days) 1 < LC/EC/IC50 <= 10 mg/l
OECD Biological degradation	Readily biodegradable. Oxidises rapidly by photo-chemical reactions in air.
Sewerage treatment	Expected to be removed in wastewater treatment

Note: Product is highly volatile and will rapidly evaporate to the air if released into water.

## 13. DISPOSAL CONSIDERATIONS

### WASTE DISPOSAL METHOD

Recover and recycle if possible. Clean empty container thoroughly, wash with detergent and water. Recycle if possible. Do not reuse packaging for any other purpose.

Waste material can be disposed of by incineration (preferably at high temperature) by an approved agent according to local regulations. The product is ashless and can be burned in appropriate equipment. 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.

#### 14. TRANSPORT INFORMATION

UN NUMBER	1866
HAZARD CLASS:	3
NZ DANGEROUS GOOD CLASS & SUBSIDIARY RISK	3.1C
PACKING GROUP	III
HAZCHEM	3[Y]
PROPER SHIPPING NAME	RESIN SOLUTION, FLAMMABLE (hydrocarbon resin solution)
Dangerous Goods Segregation: Refer to current DG transport code for details. This product is DG class 3, packing group III	

#### 15. REGULATORY INFORMATION

**EPA 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)

This material is subject to the following international agreements:

Basel Convention (Hazardous Waste)

Wastes from the production, formulation and use of organic solvents

International Convention for the Prevention of Pollution from Ships (MARPOL)

Annex III - Harmful Substances carried in Packaged Form

#### 16. OTHER INFORMATION

##### Literary reference

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.