



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: ER-921

Recommended Uses: Curing aid and evaporation retarder 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 eye & skin contact, and inhalation of spray.



Hazard information:

Causes eye irritation. Irritating to the skin with prolonged contact. Poisonous if ingested in large quantities. Flammable vapours given off if heated. Keep away from open flames & hot surfaces. No smoking.

3. COMPOSITION

Name	CAS Number	Content
Isopropanol	67-63-0	<8%
Non-hazardous ingredients	—	to 100%

4. FIRST AID MEASURES

FIRST AID:

INHALATION No specific measures. If vapours are concentrated, move victim to fresh air.

SWALLOWED Do not induce vomiting. Give a glass of water. If feeling unwell, seek medical advice/attention. If a large quantity has been swallowed, seek medical attention.

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 May cause dryness and cracking following continuous and prolonged contact. For prolonged use, wear gloves. Wash hands well after use.

5. FIRE FIGHTING MEASURES

UNUSUAL OR EXPLOSIVE HAZARDS Flammable vapours given off if heated to above 50 °C

SPECIAL FIREFIGHTING PROCEDURES AND UNUSUAL FIRE AND EXPLOSION HAZARDS During fire, gases hazardous to health may be formed.

EXTINGUISHING MEDIA Use fire-extinguishing media appropriate for surrounding materials.

HAZARDOUS COMBUSTION PRODUCTS Potentially carbon monoxide and carbon dioxide.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN WHEN MATERIAL IS SPILLED OR RELEASED

Beware of slipping hazard. Cordon off area where spill occurred. Stop pedestrian and vehicular traffic until spill is cleaned up. Soak up liquid with an absorbent material such as sand, earth, sweeping compound or other similar material. Package collected absorbent material in suitable containers that are in good condition for later disposal. Thoroughly clean area where spill occurred with water and use a water blaster or manual scrubbing until no residue left. Prevent runoff of large amounts into drains, streams or rivers. Product will evaporate with cleaning water leaving minimal residue.

ENVIRONMENTAL INFORMATION

As this product is miscible with water, large amounts may be toxic to aquatic organisms. Absorb any run-off from cleaning spills with non-combustible, absorbent material and dispose appropriately.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Avoid contact with eyes. If eye contact occurs, immediately rinse with water as per First Aid Measures (section 4).

CONDITIONS FOR SAFE STORAGE

Keep out of reach of children.

Store in a cool location (15-25 °C) away from heat sources and open flames.

Keep container tightly closed when not being used. Use in a well-ventilated area.

MATERIALS TO AVOID

None known, but may affect polystyrene and natural rubber after long periods of contact.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE STANDARDS

TWA None Established

STEL None Established

ENGINEERING CONTROLS

A supply of clean water is recommended in case of eye contact.

PROTECTIVE GLOVES & CLOTHING

Wear PVC gloves, impervious to chemicals, preferably long, for prolonged contact. Protective clothing is not required under normal conditions.

EYE PROTECTION

Wear eye goggles when spraying.

OTHER PROTECTION

No special requirements.

9. PHYSICAL AND CHEMICAL PROPERTIES

VAPOR DENSITY (Air = 1)	>1 (isopropanol)
BOILING POINT	Initial boiling point, 82 °C approx.
SOLUBILITY IN WATER	Completely soluble / miscible
SPECIFIC GRAVITY	1.0
VISCOSITY	Thin runny liquid, similar to water.
APPEARANCE AND ODOUR	Pale yellow, slight alcohol odour.
FLASH POINT	44 degrees C ASTM D93A (Pensky Martens Closed Cup method)

10. STABILITY AND REACTIVITY

STABILITY	Stable.
MATERIALS TO AVOID	Sources of ignition (open flame/hot surfaces), strong oxidising agents.
HAZARDOUS COMBUSTION PRODUCTS	Will not form hazardous decomposition products during normal storage or use. Under severe thermal degradation, low molecular weight organic compounds will be formed.
HAZARDOUS REACTIONS	Stable under normal use conditions.

11. TOXICOLOGICAL INFORMATION

INGESTION	Not expected to cause adverse health effects for small amounts. May cause stomach pain, vomiting and diarrhoea for larger quantities. Quantities in excess of 1 – 2 L could be fatal due to isopropanol content. Symptoms of overexposure include flushing, pulse rate decrease, lowered blood pressure, narcosis, headaches, dizziness, vomiting, and nausea amongst others.
INHALATION	Not irritating under normal use in open areas.
CONTACT	May cause skin defatting following prolonged exposure. Irritating to the eye.
CARCINOGENICITY	Not a carcinogen.
TOXICITY TO REPRODUCTION:	Does not impair fertility.
MUTAGENICITY	Isopropanol in 100% concentration has mutation data reported.
CHRONIC HEALTH EFFECTS	Prolonged skin contact may result in defatting and irritation. Isopropanol is easily absorbed through the skin yielding a narcotic reaction; therefore continual contact without proper skin protection should be avoided.

12. ECOLOGICAL INFORMATION

Expected to be toxic to aquatic organisms in large quantities.

OECD Biological degradation	Expected to be biodegradable. Product rapidly evaporates to the air.
Sewerage treatment	No data. 100% isopropanol is not suitable for disposal via sewers.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Recover and recycle if possible. Thoroughly wash empty containers before recycling or reuse. Empty containers are not to be reused for storage except for chemicals compatible with the container.

Small amounts of waste material can be disposed of by diluting with water (10 parts water to 1 part ER-921) and releasing to sewer, or in general landfill waste, or applied to concrete and allowed to dry. 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 – ROAD, RAIL & MARINE

UN NUMBER	1993
HAZARD CLASS:	3
NZ DANGEROUS GOOD CLASS	3.1C
PROPER SHIPPING NAME	Flammable Liquid, N.O.S.
POISON SCHEDULE	NA
PACKING GROUP	III

15. REGULATORY INFORMATION

HSNO Approval number:	HSR002662
Group Standard:	Surface Coatings and Colourants (Flammable) Group Standard 2006
HSNO Substance classification	3.1C, 6.3B, 6.4A

16. OTHER INFORMATION

Date of Issue: 31 March 2014
Supersedes Date: December 2012

Legend



Warning



Flammable vapours

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.