



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: **AQUELLUX S**

Recommended Uses: Water repellent for exterior mineral substrates.

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 inhalation of vapours or spray mists.

Hazard information:



Flammable liquid and vapour



Harmful. May cause lung damage if swallowed. May be harmful if swallowed.

Vapours may cause drowsiness and dizziness.

Causes eye irritation. Repeated exposure may cause skin dryness or cracking.

COMPOSITION

Name	CAS Number	Content
1,2,4 Trimethyl benzene	95-93-6	2 - 4%
Trimethoxy (2,4,4-trimethylpentyl) silane	34396-03-7	< 1.5%
Xylene, mixed isomers	1330-20-7	< 5%
Methanol	67-56-1	< 0.08%
Non-hazardous ingredients	—	To 100%

FIRST AID MEASURES

FIRST AID:

INHALATION Move victim to fresh air if necessary. Begin artificial respiration if breathing has stopped.

SWALLOWED **DO NOT** 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.

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. If irritation occurs, 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 746 766.

Treat according to symptoms. Gastric lavage may be indicated if ingested. Do not wait for symptoms to develop. General measures should be taken to control acidosis and maintain urine output. In case of swallowing, alkylsilicone resin splits off methanol in contact with water (also in gastrointestinal tract), therefore consider poisoning effects by methanol and observe known period of latency of several days.

FIRE FIGHTING MEASURES

FLASH POINT 35 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.

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 spilt, 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.

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.

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. 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. Use with adequate ventilation; avoid breathing of vapours, especially if product is sprayed. 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.

EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE STANDARDS

TWA 300 mg/m³ (52 ppm) highest allowable exposure concentration in an 8-hour day for a 5-day working week.
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 should be worn. A type "A" filter material is considered suitable.

PROTECTIVE GLOVES & CLOTHING

Protective clothing such as overalls should be worn. Wear 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.

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

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. Reacts with water and through hydrolysis, releases small quantity of Methanol.

TOXICOLOGICAL INFORMATION

INGESTION	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. Toxicity (oral) >2000 mg/kg (rat) based on white spirit.
INHALATION	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	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. Toxicity (dermal) > 2000mg/kg (rat) based on white spirit.
CARCINOGENICITY	Not a carcinogen.
MUTAGENICITY	Not a mutagenic hazard.
CHRONIC HEALTH EFFECTS	In case of swallowing, alkylsilicone resin splits off methanol in contact with water (also in gastrointestinal tract), therefore consider poisoning effects by methanol and observe known period of latency of several days.

ECOLOGICAL INFORMATION

Fish toxicity	Harmful, LC ₅₀ (96hr) = 10 - 100 mg/l
Algae toxicity	Expected to be toxic, (toxicity threshold 7 – 8 days) <= 10 mg/l
OECD Biological degradation	Readily biodegradable.
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.

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.

TRANSPORT INFORMATION

UN NUMBER	1993
HAZARD CLASS:	3
NZ DANGEROUS GOOD CLASS & SUBSIDIARY RISK	3.1C
PACKAGING GROUP	III
HAZCHEM	3[Y]
PROPER SHIPPING NAME	FLAMMABLE LIQUID, N.O.S (alkylsilicone resin hydrocarbon solution)

Dangerous Goods Segregation: Refer to current DG transport code for details. This product is DG class 3, packing group III

REGULATORY INFORMATION

HSNO Approval number: HSR002662
Group Standard: Surface Coatings and Colourants (Flammable) Group Standard 2006
HSNO Substance classification: 3.1C, 6.1E, 6.4A
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)
Location and transit depot test certification	500 L (closed containers greater than 5 L) 1,500 L (closed containers up to and including 5 L) 250 L (open containers)
Hazardous atmosphere zone	100 L (closed containers) 25 L (decanting) 5 L (open occasionally) 1 L (open containers in continuous use)
Fire extinguishers	500 L
Response plans and secondary containment	10,000 L
Signage	1000 L

OTHER INFORMATION

Date of Issue: June 2010
Supersedes Date: April 2008

Legend



Warning



Flammable liquid & vapour

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.