



FRASER BROWN & STRATMORE LTD.

Products for Concrete and Construction

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Safety Data Sheet

Hazardous Substance, Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: **Silac**

Recommended use: Water repellent for exterior mineral substrates

Supplier: Fraser Brown & Stratmore Limited

Street Address: 185 Rata Street
Naenae, Lower Hutt
New Zealand

Telephone: 0800 835 699

Facsimile: 0800 342 737

Emergency telephone number: 0800 POISON / 0800 764766

2. HAZARDS IDENTIFICATION

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

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

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

Product name: Silac

Substance Key: SILAC514

Issued: 09 May 2014

Version: 1.0

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

Class: 3 Flammable Liquid

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO.	PROPORTION
1,2,4-Trimethyl benzene	95-93-6	1.3-6.5%
Trimethoxy (2,4,4-trimethylpentyl) silane	34396-03-7	<1.4%
1,3,5-Trimethyl benzene	108-67-8	0.45-2.2%
Ethylbenzene	100-41-4	<0.1%
Methanol	67-56-1	<0.08%
Mineral Turpentine	64742-95-6	6 – 12%
Acrylic copolymer	Proprietary	6 – 12%
White spirit	8052-41-3	>60%
Ingredients determined to be non-hazardous	-	Balance
		100%

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (pH: 0800 764 766).

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin contact: For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance.

Eye contact: If in eyes wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Ingestion:

Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

PPE for First Aiders: Wear overalls, safety glasses and impervious gloves. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Specific hazards: Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Nearby equipment must be earthed. Electrical requirements for work area should be assessed according to AS3000. Vapour may travel a considerable distance to source of ignition and flash back. Avoid all ignition sources. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc) must be eliminated both in and near the work area. Do NOT smoke.

Fire fighting further advice: If safe to do so, remove containers from path of fire. Keep containers cool with water spray. On burning may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

Suitable extinguishing media: If material is involved in a fire use alcohol resistant foam, standard foam or dry agent (carbon dioxide, dry chemical powder).

6. ACCIDENTAL RELEASE MEASURES

Shut off all possible sources of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. If contamination of sewers or waterways has occurred advise local emergency services.

Dangerous Goods – Initial Emergency Response Guide No: 14

7. HANDLING AND STORAGE

Handling: Avoid skin and eye contact and inhalation of vapour, mist or aerosols.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from incompatible materials described in Section 10. Store away from sources of heat or ignition. Keep containers closed when not in use - check regularly for leaks.

This material is classified as a Dangerous Good Class 3 Flammable Liquid as per the criteria of the New Zealand NZS 5433: Transport of Dangerous Goods on Land and must be stored in accordance with the relevant regulations.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

National occupational exposure limits:

No value assigned for this specific material by the Department of Labour New Zealand.

However for:

	WES-TWA		WES-STEL		CARCINOGEN CATEGORY	NOTICES
	ppm	mg/m3	ppm	mg/m3		
Ethylbenzene	100	4334	125	543	-	-
Methanol	200	262	250	328	-	-

As published by the Department of Labour New Zealand.

WES-TWA (Workplace Exposure Standard – Time-weighted Average). The time-weighted average exposure standard designed to protect the worker for the effects of long-term exposure.

WES-STEL (Workplace Exposure Standard - Short-Term Exposure Limit). The 15-minute average exposure standard. Applies to any 15-minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue changes, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Engineering measures:

Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator. Vapour heavier than air - prevent concentration in hollows or sumps. DO NOT enter confined spaces where vapour may have collected. Keep containers closed when not in use.

Personal protection equipment:

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES.

Wear overalls, safety glasses and impervious gloves. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using. If risk of inhalation of exists, wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid skin and eye contact and inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour:	Clear colourless liquid
Solubility:	Insoluble in water
Specific Gravity (20 °C):	0.825
Relative Vapour Density (air=1):	>1
Vapour Pressure (20 °C):	N Av
Flash Point (°C):	36
Flammability Limits (%):	LEL – 0.5; UEL – 7
Autoignition Temperature (°C):	N Av
Melting Point/Range (°C):	N Av
Boiling Point/Range (°C):	>140
pH:	N App
Viscosity:	N Av
Total VOC (g/Litre):	N Av

(Typical values only - consult specification sheet)

N Av = Not available

N App = Not applicable

10. STABILITY AND REACTIVITY

Reactivity: No reactivity hazards are known for the material.

Chemical stability: This material is thermally stable when stored and used as directed.

Hazardous reactions: No known hazardous reactions.

Conditions to avoid: Elevated temperatures and sources of ignition.

Incompatible materials: Oxidising agents.

Hazardous decomposition products: Oxides of carbon and nitrogen, smoke and other toxic fumes.

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 Effects

Inhalation: Material may be an irritant to mucous membranes and respiratory tract.

Skin contact: Contact with skin will result in irritation.

Ingestion: Harmful if ingested. Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.

Eye contact: May be an eye irritant.

Acute toxicity

Inhalation: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >20 mg/L

Skin contact: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >2,000 mg/L

Ingestion: This material has been classified as a 6.1E hazardous substance. Acute toxicity estimate (based on ingredients): 2,000 – 5,000 mg/L

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 respiratory 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 non-hazardous.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as a Category Acute 2 Hazard. Acute toxicity estimate (based on ingredients): 1 - 10 mg/L

Long-term aquatic hazard: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >100 mg/L

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

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

UN No:	1993
Dangerous Goods Class:	3
Packing Group:	III
Emergency Response Guide No:	14

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. (HYDROCARBON SOLUTION)

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), flammable gases (Class 2.1),

if both are in bulk, toxic gases (Class 2.3), spontaneously combustible substances (Class 4.2), oxidising agents (Class 5.1), organic peroxides (Class 5.2) or radioactive substances (Class 7), however exemptions may apply.

MARINE TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea. This material is classified as a Marine Pollutant (P) according to the International Maritime Dangerous Goods Code.

UN No: 1993
Dangerous Goods Class: 3
Packing Group: III

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. (HYDROCARBON SOLUTION)

AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN No: 1993
Dangerous Goods Class: 3
Packing Group: III

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. (HYDROCARBON SOLUTION)

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.