



FRASER BROWN & STRATMORE LTD.

Products for Concrete and Construction

185 Rata Street, P O Box 35 136, Naenae, Lower Hutt, New Zealand.

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MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

Product:

BIO-R

Recommended Uses: Release agent for concrete formwork.

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

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

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

Hazard information:



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

Vapours may cause irritation.

Causes eye irritation. May cause skin dryness or cracking.

Signal Word

Warning

HSNO Hazard Classification

6.3B Substances that are irritating to the skin

6.4A Substances that are irritating to the eye

Hazard Statements

H316 Causes mild skin irritation.

H319 Causes serious eye irritation.

Prevention Precautionary Statement(s)

P102 Keep out of reach of children

P103 Read label before use

P261 Avoid breathing dust, fume, gas, mist, vapours or spray

P264 Wash hands, face and all exposed skin thoroughly after handling

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

- P302+352 IF ON SKIN: Wash with soap and water
- P333+313 If skin irritation or a rash occurs: Get medical advice/attention
- P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
- P337+313 If eye irritation persists get medical advice/attention
- P363 Wash contaminated clothing before reuse

Storage Precautionary Statement(s)

Not allocated

Disposal Precautionary Statement(s)

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

Not classified as Dangerous Goods by the criteria of the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

3. COMPOSITION

Name	CAS Number	Content
Methanol	67-56-1	May contain trace amounts.
Fatty Acids	—	1 to 5%
Biodiesel & non-hazardous ingredients	68937-84-8	To 100%

4. FIRST AID MEASURES

FIRST AID:

INHALATION	Negligible unless heated. Breathing high concentrations may be harmful. Vapours or fine mists may irritate mucous membranes. Move victim to fresh air if necessary. Begin artificial respiration if breathing has stopped. Obtain medical attention if breathing difficulty persists.
INGESTION	DO NOT induce vomiting. Give 1 - 2 glasses of water. Begin artificial respiration if the victim is not breathing – use mouth to nose and obtain medical attention immediately. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.
EYE CONTACT	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. Do not use solvents to clean skin. If persistent irritation occurs, seek medical attention or contact National Poisons Centre on 0800 746 766.

Treat according to symptoms. If in doubt, seek medical attention or advice.

5. FIRE FIGHTING MEASURES

FLASH POINT (typical) >105 degrees C ASTM D93A (Pensky Martens Closed Cup method)

UNUSUAL OR EXPLOSIVE HAZARDS: This material will ignite and burn at temperatures exceeding the flash point. Vapours are heavier than air and will accumulate in low areas. May create vapour/air explosion hazard indoors or in confined spaces. Ensure good ventilation at all times. Do not atomise product when spraying.

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. Keep fire exposed containers cool by use of water spray. For fires in enclosed spaces, fire fighters to wear self-contained breathing apparatus.

EXTINGUISHING MEDIA

Dry chemical, foam, carbon dioxide or water fog. Do not use water jet.

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 contact. Wear rubber boots.

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

Eliminate all sources of ignition. Shut off source of the spill if safe to do so. Keep public away from the area. Although biodegradable over time, 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.

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

Although biodegradable over time, prevent contamination of soil and water. Product expected to biodegrade by about 85% within 28 days. Product is expected to be removed in wastewater treatment. Product will float on water.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Do not open or store near open flame, sources of heat or ignition. No smoking. Keep container closed when not in use. Avoid contact with skin and eyes. Wear impervious gloves when applying. Use with adequate ventilation; avoid breathing vapours, especially if product is sprayed. Use only in a well-ventilated area. Avoid fine spray mists. DO NOT atomise, use low pressure spray in the form of droplets.

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, Latex as these materials may soften with contact.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE STANDARDS

TWA None Established

STEL None Established

ENGINEERING CONTROLS

General or mechanical ventilation is recommended. Avoid inhalation of vapours, especially in confined spaces. If this product is to be used in an area of poor ventilation and/or concentrations are likely to be high with little air change, a full or half facemask, with a filter suitable to provide protection should be worn. An emergency eye wash station should be located near the work area.

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.

PROTECTIVE GLOVES & CLOTHING

Protective clothing such as overalls should be worn. Wear gloves, impervious to chemicals, preferably long, for contact. Wear PVC boots. Remove and launder clothing soaked or soiled with this material before re-use.

EYE PROTECTION

Wear safety glasses or face shield when spraying or where eye contact may occur.

OTHER PROTECTION

Avoid skin contact. Use impervious gloves (PVC, neoprene or nitrile rubber). Wash hands with plenty of mild soap and water before eating, drinking, smoking, using toilet or leaving work.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOUR	Low viscosity, oily tan liquid.
VAPOR DENSITY (Air = 1)	> 1
BOILING POINT IN DEGS C	Not established
FLASH POINT (typical)	> 105 degrees C ASTM D93A (Pensky Martens Closed Cup method)
SPECIFIC GRAVITY	0.81 – 0.88.
AUTOIGNITION TEMPERATURE	Not established
EXPLOSIVE LIMITS IN AIR	0.3% LEL, 10% UEL (mist)
SOLUBILITY WITH WATER	Slightly soluble

10. STABILITY AND REACTIVITY

STABILITY

Stable under normal operating conditions.

CONDITIONS TO AVOID

Open flames, sources of heat and all forms of ignition. No smoking. Avoid contact with strong oxidising agents such as strong acids, alkalis, chlorine and other halogens, dichromates or permanganates which can cause fire or explosion.

HAZARDOUS COMBUSTION PRODUCTS

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

HAZARDOUS REACTIONS

Stable under normal use conditions.

11. TOXICOLOGICAL INFORMATION

INGESTION	Ingestion may result in headaches, nausea, dizziness, tracheal burning, vomiting and diarrhoea. Small amounts of liquid aspirated into lungs during ingestion, from vomiting or through inadvertent suction of liquid into the lungs may cause chemical pneumonitis or pulmonary oedema. May contain traces of Methanol.
INHALATION	Excessive exposure to vapour or spray mists may cause irritation to throat, nose, eyes and lungs. Practically non-toxic when applied as directed with good ventilation or protection. Use adequate ventilation and/or protective equipment.
CONTACT	Not classified as a skin irritant, but may be 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. May cause eye irritation. Low toxicity when applied as directed.
CARCINOGENICITY	Not a carcinogen.

MUTAGENICITY Not a mutagenic hazard.

CHRONIC HEALTH EFFECTS

In case of swallowing, traces of methanol may be present, therefore consider poisoning effects by methanol and observe known period of latency of several days.

12. ECOLOGICAL INFORMATION

Fish toxicity	Not expected to be toxic.
Algae toxicity	Not expected to be toxic.
Biological degradation	Expected to be biodegradable over 28 days or more.
Sewerage treatment	Expected to be removed in wastewater treatment.

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. 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

Product is not regulated for road transportation.	
UN NUMBER	NA
HAZARD CLASS:	Non-hazardous
NZ DANGEROUS GOOD CLASS & SUBSIDIARY RISK	Not regulated
PACKING GROUP	III
HAZCHEM	NA
PROPER SHIPPING NAME	Bio-R (non hazardous goods)

15. REGULATORY INFORMATION

EPA Group Standard: Construction Products (Subsidiary Hazard) Group Standard 2006; HSR002544

16. OTHER INFORMATION

Date of Issue:	09 May 2014
Supersedes Date:	31 March 2014

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.