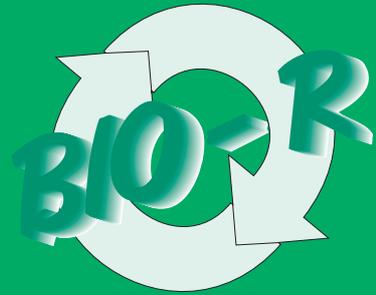


# RELEASE AGENT FOR CONCRETE FORMWORK

# BIO-R



## TECHNICAL DATA

### 1.0 DESCRIPTION

- 1.1 BIO-R is a diesel-free, biodegradable concrete release agent which reacts with the alkaline products of setting cement to form insoluble soaps. These soaps prevent any bond developing between the concrete and formwork and ensure a clean, even, blemish free surface with minimum voids.
- 1.2 BIO-R has been formulated to provide users with a diesel-free, non-waterbased release agent providing the same release properties as other premium release agents such as DISCRETE.
- 1.3 BIO-R does not affect the natural bonding characteristics of paint, plaster, and other cementitious coatings. On surfaces not subjected to weathering, (e.g. interior) wash the surface with water containing a little detergent, or brush down thoroughly.

### 2.0 ADVANTAGES & BENEFITS

#### User and Environment

BIO-R is simple to use, biodegradable, and free of sulphur and aromatics.

BIO-R is non-toxic when proper handling procedures and precautions are followed.

BIO-R contains no petroleum and is therefore safer to handle and use on a daily basis than other release agents.

BIO-R is almost odourless, meaning less complaints regarding clothing contamination and reduced odour when sprayed.

BIO-R is essentially non-irritating to skin. Users are unlikely to develop rashes when in contact with BIO-R. Proper protective clothing and gloves are recommended when applying.

BIO-R aquatic toxicity is essentially insignificant meaning less damage to the environment if BIO-R is spilt or accidentally released into soil or water.

BIO-R will degrade by about 85% in water after 28 days.

BIO-R flash point is over 100°C and is therefore not restricted for transport or storage.

#### Concrete Release

Produces a clean white release with a minimum of voids.

Maintains the surface of steel moulds.

BIO-R does not affect the natural bonding characteristics of paint, plaster and other cementitious coatings.

Increases the life of wooden forms and prevents rust on steel forms.

Will not stain or discolour concrete.

Ready to use as supplied.

Is not waterbased, and will therefore not wash off forms when exposed to showers or light rain.



## Fraser Brown & Stratmore Ltd

Address: 185 Rata Street, PO Box 35136 Naenae, Lower Hutt, New Zealand

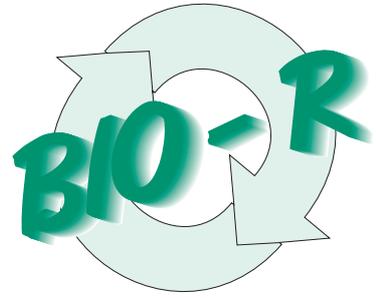
Telephone: 04 567 8436 Freephone: 0800 835 699 Facsimile: 04 567 7232 Freefax: 0800 FIBRES (342 737)

Website: [www.fbsltd.co.nz](http://www.fbsltd.co.nz)

Email: [info@fbsltd.co.nz](mailto:info@fbsltd.co.nz)

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# BIO-R

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## TECHNICAL DATA Continued

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### 3.0 PHYSICAL PROPERTIES

3.1 Colour	Transparent golden
3.2 Specific Gravity	0.84
3.3 Flash Point	140°C (Closed Cup Flash Point (ASTM D93))
3.4 Viscosity	Very low (Sprayable)
3.5 Toxicity	Non toxic when used as directed.
3.6 D.G. Classification	Not Regulated
3.7 Shelf Life	Unlimited in original sealed containers
3.8 Coverage	Timber Formwork.....up to 19m <sup>2</sup> /litre Metal Formwork.....up to 40m <sup>2</sup> /litre

### 4.0 USES

BIO-R is effective on all types of moulds and formwork (except polystyrene, latex and some plastics - check before use as BIO-R may soften or melt some plastics/rubber). BIO-R may be sprayed daily onto mixers, hoist buckets, wheelbarrows and all other equipment and machinery on which concrete may adhere to keep the concrete soft and easily removed.

### 5.0 APPLICATION

- 5.1 Preferably by spray which will permit the rates of coverage to be obtained. Brush application may also be employed but the material should be well brushed out to obtain the most economic and effective results. Do not atomise the product - apply using low pressure airless spray in the form of fine droplets.
- 5.2 Being a chemical release agent, BIO-R does not rely for its effectiveness on quantity, and is still active although the formwork may appear dry. Do not over apply to new and porous wood.
- 5.3 Formwork is best treated before being erected, thus avoiding contamination of reinforcement. Should reinforcement become coated with BIO-R by accident, it should be painted with cement slurry to react with the BIO-R and this slurry should be brushed off immediately before the concrete is poured.
- 5.4 BIO-R should be applied to the formwork prior to each use, but once applied, can be exposed to normal weather conditions for up to two weeks in the case of timber forms and up to three weeks in the case of steel forms. On exposure for longer periods than these, or if subjected to rain, dirt or dust, a further application of BIO-R should be made.

### 5.0 PACKAGING

4, 20 and 210 litres.

### 6.0 SAFETY & PRECAUTIONS

Refer to Material Safety Data Sheet for handling and first aid information.



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