



Form Release Bio-D

Water Based Form & Mould Release Agent

Bio Degradable

INTRODUCTION

Form Release Bio-D is an emulsion of **organic oil's** in water, which can be applied to concrete formwork to aid in the release of the hardened concrete from the casting form. **Form Release Bio-D** forms a physical barrier between the form and the concrete. The soap like material used as the emulsifier reacts with the free lime on the surface of the concrete, forming a chemically inert calcium soap that enhances the separation of the concrete from the mould surface. The chemically reactive components in **Form Release Bio-D** provide a water repellent interface, which protects formwork and ensures an even colour and texture of the cast concrete. In addition to preventing adhesion of the cement matrix to formwork, **Form Release Bio-D** will allow air to escape from the interface during concrete placing and vibration. This release of air minimises surface blemishes and results in a substantial reduction of remedial costs.

USES

To provide quick, clean and easy stripping of moulds and formwork to ensure high quality fair faced and stain-free concrete suitable for use on plywood, wood, fiberglass, plastic, elastomer and expanded polystyrene foam moulds. Apply by spray, brush, roller or mop.

ADVANTAGES

- Water based
- Zero VOC
- Biodegradable
- Easy to use
- Low odour
- Low cost and economical
- Non-hazardous, non-toxic
- Helps to ensure smooth finish concrete
- Non-staining for coloured products
- Easy cleaning of shutters before re-use
- Can be used on all types of formwork
- Low pickup & contamination of reinforcement steel
- Has a good weather resistance for treated forms left exposed

NON-STAINING

Does not stain concrete and can be used safely with white cement.

PREPARATION of new surfaces

No preparation is necessary but if extensive re-use of timber moulds is envisaged, it is advisable to protect all new surfaces from alkali attack which could result in a short usable life. Steel moulds require no special treatment other than the removal of rust or oil, although wetting out may be improved by lightly abrading the surface.

PREPARATION of old surfaces

Remove traces of old material such as concrete or dirt and clay deposits prior to use. Surfaces previously used with **Form Release Bio-D** will require only light brushing, as the presence of fine dust will improve the wetting out properties of **Form Release Bio-D**. This will usually result in improved release properties on the second and subsequent uses.

APPLICATION

Brush or conventional mould oil sprayer can be used to apply **Form Release Bio-D**. If a mould oil sprayer is used, care should be taken to ensure that a fine nozzle is fitted, as **Form Release Bio-D** should be applied in a light continuous film. If the material is over applied, excess material should be removed from the surface by means of a sponge or cloth. Do not allow pools of **Form Release Bio-D** to remain on the form as surface retardation of the concrete may occur.

PRECAUTIONS

Over time the oil may build up on the form surface be careful not to allow excessive build up of old material. As the emulsion contains water it may cause rust when used on steel moulds when left exposed for extended periods. It also must be kept from freezing, as separation may occur.

PROPERTIES

<i>PROPERTY</i>	<i>VALUE</i>
<i>Appearance</i>	<i>White opaque liquid</i>
<i>Percentage solids</i>	<i>25-30%</i>
<i>Specific gravity</i>	<i>0.95</i>
<i>Viscosity</i>	<i>40 CP</i>
<i>PH</i>	<i>8.5 +</i>
<i>Shelf life</i>	<i>6 months</i>
VOC rating as tests by EU regulation 1999/13/EC	0%

ESTIMATING

Approximate Coverage on

Steel:	30m ² /litre
Coated Form Ply:	20m ² /litre

The coverage rate is dependent on the porosity of the mould material being used. The coverage rate and the form release properties **will** be reduced if the formwork is of an old/worn nature.

STORAGE

Shelf life is at least 6 months if protected from frost or prolonged exposure to elevated temperatures.

HEALTH & SAFETY

Form Release Bio-D is non-toxic and classed as non-hazardous under Work Safe Guidelines; however, it is advisable to wear goggles when spraying. Inhalation of spray should be avoided. In the case of excessive skin contact, wash with soap and water and apply skin conditioning cream. Should contact with eyes occur, flush with clean water for 10 minutes. If irritation persists obtain medical attention. If the product is swallowed **DO NOT** induce vomiting. Obtain medical attention immediately.

Read MSDS and data sheet carefully before first use. In emergency, contact any Poisons Information Centre.

FIRE

Form Release Bio-D is water based and is therefore non-flammable.

PACKAGING

Form Release Bio-D is available in 20 Lt, 200 Lt 1000 Lt IBC's.