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ANGLOMOIL
SUPERIOR LUBRICANTS
Est. 1975

Bio Mould Oil

Technical Data Sheet

Product Description

Bio Mould Oil has been specially formulated using biodegradable ingredients to ensure clean concrete release from steel, aluminium, plywood or composite forms. It minimises surface irregularities, reduces voids and helps protect forms and formwork from rust.

It's all in the chemistry.

- **Correct Acidity** – Concrete is very alkaline, having a pH of 11 to 12. As it reacts with atmospheric carbon dioxide, the pH decreases but seldom falls below 9. When damp concrete comes into contact with organic acids, a soap-like film is formed, which prevents the concrete sticking in the form.
- **Adherence** - As well as preventing the concrete sticking in the form the release agent must itself stick firmly to the surface of the form, so that it does not run off before the concrete is poured in. This is particularly important when it comes to metal moulds, when it can be difficult to get a release agent to remain in place, especially if the form is exposed to strong vibrations. Placing concrete in the mould also puts a mechanical strain on the release agent.
- **Viscosity** – Bio Mould Release Oil has been formulated to achieve a clean release and good form adherence. The usual method of applying the mixture is to spray it around the surfaces of the mould, which means the viscosity must be correct. If the product is to be used in cold climates it must also be fluid in the winter.
- **Biodegradability** – Bio Mould Oil is completely degradable, but even though it usually takes less than one month to degrade in soil or water environments, care must still be taken to avoid any spillages. In the event of a spill, use spill socks to contain the liquid followed by proper absorbent to clean up.
- **Additives** – A functioning release agent is created by using an oil as a base and adding various substances to produce the right properties. The desired acid value is obtained by adding fatty acids, and, to get the right stickiness, wetting agents are added that reduce the oil's surface tension.
- Other additives are needed for a range of functions, including preventing air holes forming in the concrete and counteracting corrosion.

Suggestions for Use

Apply at a rate of 10-20 ml / m² or as little as possible whilst ensuring a thorough and even coverage over the entire working surface of the mould. This should provide optimum performance and minimize the potential for sticking, uneven release and build up on the moulds. Excess material may compromise performance and can be removed with a mop or soft cloth.

Hand sprayers constructed with a cap type filling device will allow easy filling without the possibility of dust contamination. They should also be fitted with a suitably sized flat fan nozzle and appropriate tip strainer.

A superior surface finish may be attained by applying Bio mould with a damp clean soft flannel cloth. CAUTION—avoid use on rubber or latex fittings or moulds as Bio mould can penetrate these materials and cause shape distortion. Viton is generally recommended for seals and fittings.

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Application Chart

		General Use			Form Material		
Product	Type	Concrete Release	Clay release	Die Lub't	Steel	Timber	Concrete
Bio Mould Oil	Methyl Ester/Soap	X	X	X	X	X	X

Storage and Handling

- When stored indoors at temperatures below 40°C and in closed original containers, this product can be stored for at least 1 year.
- Avoid exposure to air for prolonged periods.
- Product may thicken or solidify if cooled below 0°C.
- Do not allow water to contaminate product.

Typical Properties

- Specific gravity 0.876
- Viscosity at 40°C 8.2 Cst
- Viscosity at 100° 2.59 Cst
- Flash point °C 172
- Odour bland to oily
- Min application temp 5°C
- Saponification number 11.0
- VOC <1%

Master Item# 2005
Pack Size Availability: 20L, 200L, IBC=1000L

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