Technical Information

SITREN® MR 870

Product description

SITREN® MR 870 is an emulsion concentrate based on biodegradable oils for the formulation of environmentally friendly mould release emulsions.

Physical properties

Appearance	milky white liquid
Type of emulsion	oil in water (o/w)
Active content	56 + 2 %
Density (20 °C)	approx. 1 g/cm^{-3}

Application

- Concentrate for the formulation of stable mould release emulsions.
- Mould release agent for on-site use in precast industry.

Properties/Benefits

SITREN® MR 870 reduces the adhesion between concrete and mould resulting in minimum cleaning and wear of the mould yielding improved surface properties of the concrete at the same time.

Additionally, SITREN® MR 870 provides the following benefits and advantages:

- Readily biodegradable according to OECD criteria
- Smooth surface
- Reduced number of pin holes and other surface defects
- No discoloration of the concrete surface
- Reduced dust build-up on moulds – resulting in a cleaner surface and less cleaning cycles
- For horizontal and vertical cast concrete applications
- Easy to dilute and apply
- Dilutions of SITREN® MR 870 exhibit excellent storage stability (tap water may be suitable)
- Reduced health and environmental risks due to biodegradable oil

Dosage and Handling

For the formulation of stable mould release emulsions SITREN® MR 870 may be diluted 1 : 1 to 1 : 3 by adding water (demineralised water or soft tap water) to the concentrate. Dilutions have to be protected by adding a suitable preservative (e. g. Acticid MBS from Thor-Chemie).

For direct use in precast applications SITREN® MR 870 has to be applied from pre-dilutions. The mould should be thoroughly cleaned prior to application of the mould release agent. The entire mould surface has to be covered with SITREN® MR 870, e. g. by spraying before placing the reinforcement. Any excess of the mould release agent needs to be removed in order to avoid adverse effects on the concrete's surface properties.

Typical treat rate of SITREN® MR 870 (1 : 1 dilution) may vary from 10 – 18 ml/m2. SITREN® MR 870 should not be applied at temperatures below 0 °C or during heavy rain falls.

Biological degradability

Biological degradability is 95 % (OECD method 301 F; testing period: 28 days).

SITREN® MR 870 is readily biodegradable according to OECD criteria.

Registration status

The ingredients of SITREN® MR 870 are listed in the following chemical inventories:

EINECS, TSCA, ECL, DSL

Further information is available on request.

Storage stability

SITREN® MR 870 may be stored in closed containers for at least 12 months. The product has to be stored under frost-free conditions; storage conditions should not exceed 35 °C. The same applies to dilutions of SITREN® MR 870. Improper dilution conditions or preservation may adversely affect the stability of the diluted product.

Packaging

Pallet à 300 kg (6 x 50 kg plastic drums)
Pallet à 720 kg (4 x 180 kg plastic drums)
Container à 900 kg

Hazardous goods classification

Information concerning

- classification and labelling according to regulations for transport and for dangerous substances
- protective measures for storage and handling
- measures in case of accidents and fire
- toxicity and ecological effects

is given in our material safety data sheets.

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