

## EcoFine® 1500 is an ultra-superfine, cementitious injection grout for stabilising and strengthening soil and sand substrates

### Uses

EcoFine® is an inorganic grouting material composed of ultra-superfine particles, and as a grout has excellent permeability, strength and durability.

It is suitable for sealing and/or stabilising sandy soil foundations, and especially for grouting soils for permanent structures such as foundations, tunnels, dams, oil tanks etc.

- Preventing settlement of roads and embankments to be constructed on weak ground
- Preventing heaving and boiling embankments inside cofferdams
- Stabilisation of soil in zones susceptible to landslides
- Remedying and preventing differential settlement of oil tanks
- Water sealing of joints on water and sewerage mains
- Underground oil storage facilities
- Preventing seepage of river embankments
- Preventing seepage of soil in reclaimed land
- Preventing liquefaction of sandy soil
- Fixation and water sealing in fractured zone during tunnel construction
- Curtain grouting for dams and embankments
- Ensuring leak-tightness of retention dykes around oil tanks
- Stabilisation and sealing of work faces in shield tunnelling and pipe insertion work
- Water sealing of tunnel walls, dam bases and reservoir bases

### Advantages

- No soil polluting properties. Consisting entirely of inorganic materials ensures no pollution of underground water or soil
- Remarkable penetrating abilities. The average particle size of EcoFine® 1500 is 3 microns with a grain size distribution finer than 12 microns. The specific Surface Blaine fineness of 15,400cm<sup>2</sup>/g, enables penetration comparable to chemical grouts
- High hardened strength - the ultra fine grains of the EcoFine® are chemically activated, so that curing provides rapid hardening to a high strength. This initial hardening is followed by further hardening during an extended period

- Excellent durability - after hardening by hydration, EcoFine® acquires impermeability, which protects it from underground and sea water, to ensure extremely long durability
- Easy handling - with its strong dispersive quality, EcoFine® is highly resistant to separation and sedimentation, which provides protection against damage for the injection equipment, and prevents obstruction of pipework
- Fast set time - the set time of EcoFine® is generally between 4 - 8 hours

### Description

EcoFine®, an ultra-superfine cementitious soil stabilisation grout is supplied as a ready to use dry powder. EcoFine® is a highly permeable grout, suitable for low pressure injection into sandy soil to produce solid foundations.

### Properties

<b>Appearance</b>	Greyish white ultrafine particles
<b>Specific gravity</b>	3.0 ± 0.1
<b>Unit weight</b>	0.9 ± 0.1 kg / litre
<b>Blaine fineness</b>	Approx 15400 cm <sup>2</sup> / g

### Chemical Composition

Ig. loss	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	CaO	MgO	SO <sub>3</sub>	Total
0.3	29.0	13.2	1.2	49.2	5.6	1.2	99.7

### Gradation of EcoFine® particle sizes

% of sieve Grain size (microns) Specific Surface Blaine

	Grain size (microns)	Specific Surface Blaine
<b>D98%</b>	12.0	15,400 cm <sup>2</sup> / g
<b>D50%</b>	4.2	15,400 cm <sup>2</sup> / g
<b>D25%</b>	3.2	15,400 cm <sup>2</sup> / g



## Handling and Storage

EcoFine<sup>®</sup> has a shelf life of 6 months if kept in a dry store in sealed bags. Store the product on pallets (or similar) in a dry warehouse. Do not place directly on floor. Transportation may be in bulk road or rail tankers or in paper bags.

If stored in high temperature and high humidity locations, the shelf life may be reduced. Do not use EcoFine<sup>®</sup> from a broken bag.

## Supply

EcoFine<sup>®</sup> is available in bulk, bulk bags and 20 kg multi-walled paper bags. Paper bags are palletised and stretch wrapped.

## Contact

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