

ETONIS® 1400 S

Polymer Dispersions

ETONIS® 1400 S is a polymer dispersion for soil stabilization.

When ETONIS® 1400 S is applied to the soil, the product forms polymer bridges between the soil or aggregate particles and the hydrated cement particles. ETONIS® 1400 S is responsible for the formation of a flexible and robust network that is durable and water resistant.

Properties

The use of ETONIS® 1400 S increases the flexibility and flexural strength of the composite material. Therefore it is ideal for soil solidification and stabilization in road construction. The use of ETONIS® 1400 S may reduce the needed cement content.

Technical data

Specification

Property	Condition	Value	Method
Solids content	-	46 - 48 %	DIN EN ISO 3251
Viscosity, dynamic	-	200 - 800 mPa·s	DIN EN ISO 2555
pH	-	4 - 6	-

General Characteristics

Property	Condition	Value	Method
Density	-	1.06 - 1.08 g/cm ³	ISO 2811
Appearance	-	milky-opaque	-

These figures are only intended as a guide and should not be used in preparing specifications.

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

Protect against frost.

Applications

- Soil Stabilization and Dust Prevention

Application details

For soil stabilization, the recommended mixing ratio is 4 parts hydraulic binder and 1 part ETONIS® 1400 S based on hydraulic binder by weight. ETONIS® 1400 S can be added to the water used to regulate the optimum moisture content. The dosage of hydraulic binder, water and ETONIS® 1400 S is depending on the soil characteristics which can be previously determined in a suitable lab.

In case of challenging soils or the need for even higher performance the additive ETONIS® 1450 S can be used. For typical application fields of ETONIS® 1400 S, refer to the section "application". Please discuss additional applications with your WACKER customer representative.

Packaging and storage

Packaging

1 kg bottle, 10 kg can, 1000 kg IBC

Storage

When the dispersion is stored in tanks, proper storage conditions must be maintained. The product has a shelf life of 6 months starting from the date of receipt if stored in the original, unopened containers at temperatures between 5 and 30 °C. Any longer periods for the maximum storage period that may be described in the Certificate of Analysis which accompanies each shipment of the product, take preference over this suggestion in which case the time period stated in the Certificate of Analysis shall be solely authoritative. Iron or galvanized iron containers and equipment are not recommended. Corrosion could result in discoloration of the dispersion or blends made from it in further processing. We therefore recommend the use of containers and equipment made of ceramic, rubberized or enameled materials, appropriately finished stainless steel, or plastic (rigid PVC, polyethylene or polyester resin). As polymer dispersions may tend to superficial film formation, skins or lumps may be formed during storage or transportation. A filtration process is thus recommended prior to utilization of the product.

Preservation for Transport, Storage and further Processing:

The product is adequately preserved during transportation and storage if kept in the original, unopened containers. However, if it is transferred to storage tanks, the dispersion should be protected against microbial attack by adding a suitable preservative package.

Measures should also be taken to ensure cleanliness of the tanks and pipes. In unstirred tanks, a layer of preservative-containing water should be sprayed onto the surface of the dispersion to prevent the formation of unwanted skin and possible attack by microorganisms. The thickness of this water layer should be < 5 mm for low viscosity dispersions and up to 10–20 mm for high viscosity products. Proper procedures – periodic tank cleaning and sanitization – must be set up in order to prevent microbial attack. Contact your biocide representative/supplier for further plant hygiene recommendations. Measures should be taken to ensure that only clean air enters the tank when the dispersion is removed.

Finished products manufactured from polymer dispersions usually also require preservation. The type and scope of preservation will depend on the raw materials used and the anticipated sources of contamination. The compatibility with other components and the efficacy of the preservative should always be tested in the respective formulation. Preservative manufacturers will be able to advise you about the type and dosage of preservative required.

Safety notes

Comprehensive instructions are given in the appropriate Material Safety Data Sheets. These are available on request from WACKER sales offices.

QR Code ETONIS® 1400 S



For technical, quality or product safety questions, please contact:

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