

ETONIS® 3500 W (PRC)

Dispersible Polymer Powders

ETONIS® 3500 W is suitable for modifying concrete, specialty mortar and cementitious coatings for infrastructure products, in particular for shotcrete applications in underground construction, tunneling and mining. ETONIS® 3500 W is a polymer powder with a low glass transition temperature (Tg). It remains flexible down to temperatures below freezing and is suitable for end products with low emissions.

Properties

ETONIS® 3500 W (PRC) makes fresh concrete easier to process and pump because it reduces the frictional forces between cement and aggregates. It significantly reduces spray rebound while greatly improving adhesion to all substrates, particularly wet surfaces. Concrete modified with <(> <<)>productname> produces very little dust, especially during dry spraying. The cohesive properties of ETONIS® 3500 W (PRC) increase the sedimentation stability of concrete and specialty mortars, reducing bleeding and segregation. ETONIS® 3500 W (PRC) has a plasticizing effect and reduces the water/cement ratio without compromising the concrete's workability. In hardened concrete, ETONIS® 3500 W (PRC) improves adhesion, enhances flexural strength, reduces the modulus of elasticity (imparting flexibility) and increases abrasion resistance. It does not impair the concrete's high ultimate strength. Concrete modified with <(> <<)>productname> seals against pressing water, shows enhanced carbonation resistamat and prevents the ingress of aggressive media into the rix. In combination with suitable foam-control agents, <(> <<)>productname> also increases compressive and flexural strength.

Technical data

Specification

Property	Condition	Value	Method
Bulk density	-	400 - 550 kg/m ³	DIN EN ISO 60
Ash content	1000 °C	max. 12 %	specific method
Solids content	-	min. 98 %	DIN EN ISO 3251

General Characteristics

Property	Condition	Value	Method
Appearance	-	white to light beige powder	Visual

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.

Application details

ETONIS® 3500 W (PRC) may be added in powder form either to the dry concrete mix or the fresh mixed liquid concrete. Pumping and mixing cause the polymer powder to redisperse rapidly in the gauging water. Alternatively, ETONIS® 3500 W (PRC) may first be mixed with gauging water and then added with it to the dry-mix or liquid concrete. Protracted stirring of the polymer/water mixture is apt to cause individual components to settle out, but brief mixing will produce a homogenous mixture again. The amount of ETONIS® 3500 W (PRC) needed to modify concrete ranges from 2.5 - 10 wt. % relative to the quantity of cement. The amounts used in special applications such as mortar and cementitious coatings may be considerably higher. The exact amount will depend on the requirements profile. Practical benefits ETONIS® 3500 W (PRC) contains no water, so transport costs are less than for standard dispersions. Using ETONIS® 3500 W (PRC) cuts system costs by reducing material consumption (e.g. rebound), time and labor. Overall, energy costs are reduced. ETONIS® 3500 W (PRC) is suitable for modifying concrete, specialty mortar and cementitious coatings for infrastructure products, in particular for shotcrete applications in underground construction, tunneling and mining.

Packaging and storage

Packaging

25 kg paper bags Other sizes on request.

Storage

During storage, protect the product from contact with moisture. Prolonged storage at temperatures above 30 °C, especially in combination with pressure, humidity or exposure to sunlight, may result in blocking. Carefully seal any open containers and store them under suitable conditions. We recommend storing the product in a warehouse that provides cool and dry conditions. Do not store the product for more than six months, starting from the date at which it was received, unless the Certificate of Analysis contains a different date, which would take precedence. If the product is stored longer than recommended, it may still be used but users are advised to verify the properties required for the intended use.

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® 3500 W (PRC)



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

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