

ETONIS[®] 7445 A

Polymer Dispersions

ETONIS[®] 7445 A is a unique, rapid-setting vinyl acetate-ethylene copolymer. It is not simply a high-solids version of ETONIS[®] series dispersion, but a polymer that has excellent adhesion and cohesion to very difficult to bond substrate such as aggregate, base and sub-base material and asphalt emulsion.

Properties

- Good adhesion to asphalt emulsion and aggregate
- Excellent tensile strength and elongation properties
- High cohesion strength
- Excellent abrasion resistance and low temp flexibility
- Viscosity enhancer

Technical data

Specification

Property	Condition	Value	Method
Solids content	-	59.5 - 61.5 %	specific method
Viscosity, dynamic	25 °C	2000 - 3000 mPa·s	specific method
pH	-	4.0 - 6.0	specific method
Density	20 °C	approx. 1.07 g/cm ³	specific method

General Characteristics

Property	Condition	Value	Method
Minimum film forming temperature	-	0 °C	specific method
Predominant particle size	-	approx. 1 nm	specific method
Protective colloid / emulsifier system	-	polyvinyl alcohol	-
Filler and pigment compatibility	-	excellent	specific method
Appearance of the dispersion film	-	milky white	Visual
Surface of the dispersion film	-	high dry tack	specific method
Glass transition temperature	-	approx. 0 °C	specific method

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.

Applications

- Construction Materials

Application details

Properties

ETONIS® 7445 A can be compounded with cold asphalt emulsion and is combinable with all the common additives such as emulsifier, defoamer, plasticizers, thickeners, fillers and so on. ETONIS® 7445 A is a mechanical stable vinyl acetate-ethylene polymer dispersion that is readily incorporated into asphalt emulsion through addition to the soap solution (batch) process or via co-milling (continuous process).

The dispersion dries to a slightly tacky, clear, water-resistant film, which gives higher adhesion and cohesion strength, higher flexibility, excellent abrasion and stripping resistance in cold asphalt pavement system. It aids in the viscosity enhancement of the asphalt emulsion. It is also compatible with other vinyl acetate-base polymers and styrene butadiene latex polymer.

Application

ETONIS® 7445 A with its high-solids content and excellent mechanical properties make it especially useful in cold asphalt emulsion such as prime coat and tack coat, also for seal coat applications including chip seal, slurry seal, micro surfacing. ETONIS® 7445 A is designed to enhance the mechanical properties of pavements resulting in greater durability, increased driving comfort, reduced road maintenance costs and less impact on the environment. By providing consistent, high quality products, customers can easily meet their binder and mix performance requirement. The chart below summarized the ETONIS® high solid vinyl acetate ethylene polymer dispersion product for cold asphalt emulsion

- Prime coat
- Tack coat
- Seal Coat
- Chip Seal
- Slurry Seal

- Micro Surfacing

Packaging and storage

Storage

When the dispersion is stored in tanks, proper storage conditions must be maintained. The product has a shelf life of 9 months starting from the date of manufacture 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 equipment and containers are not recommended because the dispersion is slightly acidic. Corrosion may result in discoloration of the dispersion or its blends when further processed. Therefore, the use of containers and equipment made of ceramics, rubberized or enameled materials, appropriately finished stainless steel, or plastic (e.g. rigid PVC, polyethylene or polyester resin) is recommended. As polymer dispersions may tend to superficial film formation, skins or lumps may form during storage or transportation. Filtration is therefore 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. If the product is stored for a longer period, stirring is recommended before use.

Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. These are available on request from WACKER sales offices or may be downloaded from the WACKER Web site www.wacker.com/etonis.

QR Code ETONIS® 7445 A



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

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