

# PRIMIS<sup>®</sup> EP 1770



## Polymer Dispersions

PRIMIS<sup>®</sup> EP 1770 is an aqueous polymer dispersion based on vinyl acetate and ethylene. The dispersion combines moderately high solids content with a lower viscosity — a combination that permits the addition of moderate filler loadings. This results in formulations with good fluidity in board core. PRIMIS<sup>®</sup> EP 1770 is not produced with any added organic solvents and plasticizers.

## Properties

- Excellent flame-resistance and high temperature resistance
- High cohesion
- Excellent alkali-resistant

## Technical data

### Specification

Property	Condition	Value	Method
solids content	-	57 - 60 %	DIN EN ISO 3251

## General Characteristics

Property	Condition	Value	Method
Solids content	-	57 - 59 %	-
Viscosity, dynamic	-	1000 - 2500 mPa·s	-
pH	-	3.5 - 5.5	-
Frost resistance	-	protect from freezing	-
Filler and pigment compatibility	-	excellent	specific method
Glass transition temperature	-	17 °C	specific method
Predominant particle size	-	0.5 - 1.0 µm	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

- Flame-Resistant Treatment
- Protection & Insulation
- Thermal Insulation Renders

## Application details

### Properties

PRIMIS® EP 1770 is chemically stable at both high and low pH. It is compatible with an assortment of resins, solvents, plasticizers and other modifiers as well as the other VAE dispersions. PRIMIS® EP 1770 can be used in the addition of moderate filler loadings, including calcium carbonate, ATH and flame resistance powder with magnesium or bromide.

### Application

PRIMIS® EP 1770 can provide high strength and low water absorption. PRIMIS® EP 1770 offers good anti-yellowing performance when dried under high temperature. PRIMIS® EP 1770 offers good delamination strength for the board core because of strong adhesion between PRIMIS® EP 1770 and filler.

## 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.

## 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/vinnapas](http://www.wacker.com/vinnapas).

## QR Code PRIMIS® EP 1770



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

**Wacker Chemie AG**, Hanns-Seidel-Platz 4, 81737 Munich, Germany  
[productinformation@wacker.com](mailto:productinformation@wacker.com), [www.wacker.com](http://www.wacker.com)

The data presented in this medium are in accordance with the present state of our knowledge but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this medium should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The information provided by us does not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the product for a particular purpose.