

ENCOR[®] 1842

TEXTILE & NONWOVENS

(FORMERLY E 10042)

ARKEMA COATING RESINS

Product

ENCOR[®] 1842 is a formaldehyde-free, thermosetting polymer aqueous solution, designed to replace aminoplast resins or, in general, suitable when high crosslinking density is necessary.

Application details

ENCOR[®] 1842 can be used as binder for natural fibers or inorganic materials, but it also performs well when used for nonwoven composites, especially based on glass fibres.

Performance Benefits

- Formaldehyde-free, by-product of the crosslinking is water
- No yellowing, even at high temperature
- Suitable for replacing phenol, melamine and urea formaldehyde resins
- Excellent strength in wet and hot conditions
- Thermoplastic before curing, thermoset after thermal treatment

Polymer Type

- Polycarboxylic acid

Sales Specifications

Solid Content, 1h30 at 135°C, % (ISO 3251)	50 - 52
pH (ISO 976)	3 - 4
Viscosity at 23°C, mPa.s (Brookfield LV, spindle3, 20rpm) (ISO 2555)	300 - 1500

Other Characteristics¹

Appearance	Transparent, slightly yellowish
Density / Specific Gravity, g/ml (ISO 2811)	1.18

¹ The data provided for these properties are typical values, intended only as guides, and should not be construed as sales specifications

Formulation Guidelines

ENCOR[®] 1842 shows an excellent runnability and can be processed with all the common application techniques such as bath impregnation, spraying and foulard.

This product must be cured at a temperature higher than 150°C, the time necessary for the full crosslinking is temperature dependent. Curing temperature of 200°C is generally appropriate to obtain its typical mechanical and physical properties.

Neutralizing ENCOR[®] 1842 with non-volatile bases can impair the crosslinking reaction of the polymer.

ENCOR[®] 1842 can be combined with film forming polymeric dispersions to adjust its mechanical and physical properties. The stability of the hybrid system needs to be evaluated prior.

Product Safety

Please refer to the corresponding Safety Data Sheet.

Storage & Handling

ENCOR® 1842 should be stored indoors in the original, unopened and undamaged container, in a dry place at storage temperatures between 5°C and 30°C. Exposure to direct sunlight should be avoided.

The product is protected to prevent any microbial deterioration during normal conditions of storage but care should be taken to avoid accidental contamination during subsequent handling and processing.

In the above mentioned storage conditions the shelf life of the resin will be 6 months from the shipping date

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Arkema Coating Resins

420, rue d'Estienne d'Orves

92705 Colombes Cedex - France

arkema.com - arkemacoatingresins.com

The logo for ARKEMA, with the word "ARKEMA" in a bold, sans-serif font. The letters "A", "R", "K", "E", and "M" are in a dark blue color, while the letter "A" at the end is in a green color.