

TECHNICAL DATA SHEET

ENCOR[®] 1842 (Formerly E10042)

Acrylic Solution



Formaldehyde-free*

PRODUCT APPLICATION DETAILS

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. 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.

SALES SPECIFICATIONS

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

OTHER CHARACTERISTICS¹

	CHARACTERISTICS	METHODS
Appearance	Transparent, slightly yellowish	-
Density	1.18 g/ml	ISO 2811

*Product formulated without formaldehyde or formaldehyde releasers. During normal conditions of use, this binder does not generate formaldehyde.

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

MARKETS & APPLICATIONS

Coatings & Inks

- Textile & Leather Coating
 - Non Woven
 - Textile

Building & Construction

- Construction Materials
 - Bui Composite Fibres

PERFORMANCE BENEFITS

- 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

FORMULATION GUIDELINES

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

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 AND 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 from the shipping date.

Shelf Life (Months): 6

Headquarters: Arkema France
51, Esplanade du Général de Gaulle
92800 Puteaux – France
T +33 (0)1 49 00 80 80