

# ENCOR<sup>®</sup> 2171

INDUSTRIAL WOOD

ARKEMA COATING RESINS

ENCOR<sup>®</sup> 2171 is a hydroxylated self-crosslinking acrylic emulsion formulated without alkylphenolethoxylates, formaldehyde free, designed for 1 pack and 2 pack industrial coatings for plastics, metals and wood.

Wood application:

## Product

### Application details

ENCOR<sup>®</sup> 2171 is suitable for the formulation of clear and pigmented sealers and satin or matt topcoats applied by spray and curtain coater. The warm aspect over wood of the coatings made with ENCOR<sup>®</sup> 2171 allows its use over either light or dark veneers in thin or thick layers.

Plastics and metals application:

ENCOR<sup>®</sup> 2171 is suitable for formulation of clear and pigmented high gloss topcoats applied by spray or brush.

## Performance Benefits

- Good balance of properties
- Warm aspect over wood
- Good gloss
- Good adhesion
- Good hardness & chemical resistance
- Fast drying properties
- Formaldehyde free\*

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

## Polymer Type

- Acrylic Emulsion

## Sales Specifications

Solid Content at 105°C, % (ISO 3251)	42 - 44
pH (ISO 976)	7.0 - 8.0
Viscosity at 23°C, mPa.s (Brookfield RVT , 20rpm) (ISO 2555)	1000 max

## Other Characteristics<sup>1</sup>

Stabilizing system	A / NI
Minimum Film Formation Temperature, °C (ISO 2115)	44
Density / Specific Gravity, g/ml (ISO 2811)	1.04
Hydroxyl Content, %	1.3
Average Particle size, nm (ISO 13321)	100 max
Freeze Thaw Stability, °C (ISO 1147)	- 10

Note: Acid value and/or Hydroxyl value quoted relative to solid resin

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

## Formulation Guidelines

### RECOMMENDATIONS

ENCOR<sup>®</sup> 2171 is a dual-cure emulsion, which can be formulated in 2 different ways :

1 component self-crosslinking, in this case ENCOR<sup>®</sup> 2171 can be used as topcoat,  
2 components crosslinked with polyisocyanates. ENCOR<sup>®</sup> 2171 is used direct to the substrate or as topcoat.

Formulations can be cured at ambient temperature with a Relative Humidity lower to 70% or 30mn at 70°C.

We advise a NCO/OH ratio of 1.3.

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## Product Safety

Please refer to the corresponding Safety Data Sheet.

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## Storage & Handling

ENCOR<sup>®</sup> 2171 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](http://arkemacoatingresins.com)

