

SYNOLAC® 4013 WD 85

ARCHITECTURAL COATINGS

ARKEMA COATING RESINS

Product Application details

SYNOLAC® 4013 WD 85 is a long oil alkyd designed for use in decorative paints and wood stains.

SYNOLAC® 4013 WD 85 has been developed for the formulation of 2010 VOC compliant architectural coatings (Directive 2004/42/CED). Alone or combined with a solvent-free alkyd diluent, SYNOLAC® 4100 for instance, allows to formulate a wide range of coatings exhibiting a good hardness development.

SYNOLAC® 4013 WD 85 is supplied in low aromatic white spirit to enable the formulation of coatings that do not require adverse environmental labelling.

Performance Benefits

- Good gloss potential
- Good colour retention
- Very good hardness development
- High film build
- Good drying
- Good exterior durability

Polymer Type

- Solventborne Alkyd

Sales Specifications

Solid Content at 125°C, % (ISO 3251)	84 - 86
Viscosity at 25°C, mPa.s (Brookfield SC4-34/13R, 12 rpm) (ISO 3219)	3500 - 4500
Colour, Gardner scale (ISO 4630)	6 max
Acid value, mg KOH/g (ISO 2114)	10 max

Other Characteristics¹

Volatile	Low aromatic white spirit
Flash point, °C (ISO 3679)	40
Density / Specific Gravity at 20°C, g/ml (ISO 2811)	0.98
Type of fatty acid	Linoleic rich
Fatty Acid content, %	68

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

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

Formulation Guidelines

DRIERS

SYNOLAC® 4013 WD 85 requires metal driers to accelerate the autoxidation process. A suitable combination of driers for use in systems containing SYNOLAC® 4013 WD 85 is : 0.06 % cobalt, 0.09 % zirconium and 0.1 % calcium calculated as metals on solid resin. Depending on the formulation (clear, pigmented, etc...) and on the application, the loading of each drier may be increased or reduced in order to achieve the appropriate drying/hardness profile. The use of an anti-skinning agent is essential to prevent in-can skinning of the finished product.

SOLUBILITY

SYNOLAC® 4013 WD 85 is soluble in aromatic and aliphatic hydrocarbons, esters and ketones and partially soluble in alcohols.

COMPATIBILITY

SYNOLAC® 4013 WD 85 is compatible with most medium and long oil alkyds and can be used in conjunction with GELKYD® or SUPER GELKYD® thixotropic alkyds to produce a range of thixotropic decorative coatings.

The use of SR-350 (1), a trifunctional methacrylic monomer, can boost the hardness development of this resin if needed.

Notes: (1) Sartomer

Product Safety

Please refer to the corresponding Safety Data Sheet.

Storage & Handling

SYNOLAC® 4013 WD 85 should be stored indoors in the original, unopened and undamaged container, in a dry place at a temperature not exceeding 30°C.

Exposure to direct sunlight should be avoided.

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

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See SDS for Health & Safety Considerations.

The products described in the document are not Medical grades designated for Medical Device applications.

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For any use of Arkema's product in Medical Device applications, please contact Arkema's sales network.

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