

TECHNICAL DATA SHEET

GELKYD® 4635 WD 51

Thixotropic Alkyd

PRODUCT APPLICATION DETAILS

GELKYD® 4635 WD 51 is a soft gel polyamide modified thixotropic alkyd for use in all types of decorative coatings.

It has a reduced odour, is to be used as a co-binder for medium and long-oil alkyd resins. As it is a highly condensed resin, it prevents the penetration of the formulation into porous substrates.

It is very efficient for wetting pigments and fillers.

GELKYD® 4635 WD 51 has been designed for use in matt and satin-finish paints.

SALES SPECIFICATIONS

	CHARACTERISTICS	METHODS
Solid content (125°C)	50 - 53 %	
Reduced viscosity (solution at 40% in D40, at 2500 s ⁻¹) (25°C)	350 - 550 mPa.s	ISO 3219
Color	8 max Gardner	ISO 4630
Acid value	15 - 23 mg KOH/g	ISO 2114

OTHER CHARACTERISTICS¹

	CHARACTERISTICS	METHODS
Appearance	Soft gel	
Solvent	Low aromatic white spirit	
Flash point	40 °C	ISO 3679
Density (20°C)	0.89 g/ml	ISO 2811
Fatty acid type	Semi-drying	
Fatty acid content	61 %	

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

MARKETS

Coatings & Inks

- Architectural Coating
 - Specialty Coatings
 - Trim

GELKYD® 4635 WD 51

FORMULATION GUIDELINES

INCORPORATION

The preferred method for incorporating GELKYD® 4635 WD 51 is to add the molten resin to the mill base prior to the addition of any remaining alkyd and other components of the formulation. The advantages of using the resin in the molten state include a) easy addition and incorporation, b) low shear can be used, c) reduced tendency for non-dispersed thixotropic resin to be present.

DRIERS

GELKYD® 4635 WD 51 requires metal driers to accelerate the autoxidation process. A suitable combination of driers for use in systems containing GELKYD® 4635 WD 51 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.

COMPATIBILITY

GELKYD® 4635 WD 51 is compatible with most other thixotropic alkyds, urethane alkyds, long and medium oil length alkyds, oleo-resinous varnishes, hard resins and drying oils. Polar solvents should be avoided as they can impair the thixotropy of the GELKYD®.

PRODUCT SAFETY

Please refer to the corresponding Safety Data Sheet.

STORAGE AND HANDLING

GELKYD® 4635 WD 51 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.

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

Shelf Life (Months): 6

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

Disclaimer - Please consult Arkema's disclaimer regarding the use of Arkema's products on <https://www.arkema.com/global/en/products/product-safety/disclaimer/> which is incorporated herein by reference and made a part hereof.

Arkema France, a French société anonyme registered at the Trade and Companies Register of Nanterre under the number 319 632 790

[arkema.com](https://www.arkema.com)

ARKEMA