

## TECHNICAL DATA SHEET

# UNITHANE® 612 S 60

*Modified alkyd*

### PRODUCT APPLICATION DETAILS

UNITHANE® 612 S 60 is a fast drying short oil alkyd resin, obtained thanks to a specific selective condensation process, which allows to obtain a film with optimum resistance to outdoor exposure, hardness and chemical resistance.

The UNITHANE® 612 S 60 is particularly adapted for the formulation of anti-rust primers and varnishes.

The film of varnish formulated with UNITHANE® 612 S 60 exhibits a very good resistance to water, even after a very short drying time (3h – 75µm).

### SALES SPECIFICATIONS

	CHARACTERISTICS	METHODS
Solid content (125°C)	59 - 61 %	ISO 3251
Viscosity (Brookfield) (25°C)	2500 - 3600 mPa.s	ISO 3219
Color	8 max Gardner	ISO 4630
Acid value	10 max mg KOH/g	ISO 2114

### OTHER CHARACTERISTICS<sup>1</sup>

	CHARACTERISTICS	METHODS
Solvent	Xylene / butyl acetate	-
Flash point	27 °C	ISO 3679
Density	1.036 g/ml	ISO 2811
Fatty acid type	Vegetable fatty acids	-
Fatty acid content	36 %	-
Modification	Urethane	-

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

### MARKETS

#### Coatings & Inks

- Industrial Coating
- General Industry

# UNITHANE® 612 S 60

## FORMULATION GUIDELINES

### **DRIERS**

The following driers combination is recommended to siccativate the UNITHANE® 612 S 60, it is calculated for 100g of neat resin:

cobalt: 0.05  
zirconium: 0.15  
calcium: 0.2

Depending on the formulation (clear, pigmented, thixotropic, 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**

UNITHANE® 612 S 60 completely soluble in aromatic hydrocarbons, esters and ketones and partially soluble in aliphatic hydrocarbons and alcohols.

### **COMPATIBILITY**

UNITHANE® 612 S 60 is completely compatible with short oil alkyd resins, melamine resins and ureic and has a limited compatibility with medium and long oil alkyds, epoxy ester and nitrocellulose the compatibility should be checked taking into account the targeted ratio of resins considered.

## PRODUCT SAFETY

Please refer to the corresponding Safety Data Sheet.

## STORAGE AND HANDLING

UNITHANE® 612 S 60 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.

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