

TECHNICAL DATA SHEET

UNITHANE® 1077 WD 60

Solventborne Urethane Alkyd

PRODUCT APPLICATION DETAILS

UNITHANE® 1077 WD 60 is an urethane oil based on siccative fatty acid and aromatic isocyanate, which is recommended for high gloss and matt paints formulations for boat and frames.

UNITHANE® 1077 WD 60 can also be used in pigmented decorative gloss or eggshell finishes and should comprise between 20-50% of the media, the balance being a suitable long oil alkyd, for instance SYNOLAC® 4047 WD 90. Used in combination with this high solid binder, Co-free paints with good drying and hardness development can be achieved.

SALES SPECIFICATIONS

	CHARACTERISTICS	METHODS
Solid content (125°C)	59 - 61 %	ISO 3251
Viscosity (Brookfield) (25°C)	5000 - 6500 mPa.s	ISO 3219
Color	6 max Gardner	ISO 4630
Acid value	1 max mg KOH/g	ISO 2114

OTHER CHARACTERISTICS¹

	CHARACTERISTICS	METHODS
Solvent	Low aromatic white spirit	-
Flash point	40 °C	ISO 3679
Density	0.913 g/ml	ISO 2811
Fatty acid type	Siccative	-
Fatty acid content	66 %	-
Modification	Urethane	-

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
- Flooring
 - Floor Polish & Floor Coatings

PERFORMANCE BENEFITS

- Fast air drying
- Good durability
- Good hardness
- Good abrasion resistance

UNITHANE® 1077 WD 60

FORMULATION GUIDELINES

DRIERS

UNITHANE® 1077 WD 60 requires metallic driers to accelerate the autoxidation process. Surface and through drying can be achieved using a combination drier based on cobalt, zirconium & calcium. A suitable combination is: 0.05% cobalt, 0.1-0.2% zirconium, and 0.1-0.2% calcium, as % metal on solid resin. 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 antiskinning agent is essential to prevent in-can skinning of the finished product.

SOLUBILITY

UNITHANE® 1077 WD 60 is soluble in most aliphatic and aromatic hydrocarbons, esters and ketones and partially soluble in alcohols.

COMPATIBILITY

UNITHANE® 1077 WD 60 is compatible with long and medium alkyd resins.

PRODUCT SAFETY

Please refer to the corresponding Safety Data Sheet.

STORAGE AND HANDLING

UNITHANE® 1077 WD 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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