

SIGMADUR 500 Clear Urethane

5525

November 2006

DESCRIPTION A high performance two component acrylic polyurethane finish.

**PRINCIPAL
CHARACTERISTICS**

- Very good gloss and color retention.
- Very good application properties with conventional and airless spray equipment
- Good solvent and chemical resistance..
- Can be used over properly prepared and primed surfaces for most atmospheric applications.

COLORS AND GLOSS Clear – high gloss

BASIC DATA AT 68° F (20°C) (data for mixed product)

Mass density	approx. 8.1 lbs/gal (0.97 g/cm ³)
Solids by volume	approx. 41 %
VOC (by EPA method 24)	4.26 lbs/gal (510 g/ltr)
Recommended dry film thickness	1 mils (25 µm)
Theo. spreading rate	658 ft ² /gal at 1 mil dft (61 m ² /ltr for 25 µm)
Touch dry	6 hours
Overcoating interval	minimum 8 hours maximum unlimited
Shelf life (cool and dry place)	12 months minimum
Pot Life	7 hours at 68°F (20°C)
Induction time	None
Flash point (TCC)	86°F (30°C)

Packaging data 1 gallon mixed kit
mix ratio: 8:1
base: 0.88 gal in 1 gal can
hardener: 0.11 gal in qt can

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***RECOMMENDED SUBSTRATE
CONDITIONS AND
TEMPERATURES***

- Previous coat; (epoxy or polyurethane) dry and free from any contamination and sufficiently roughened if necessary.
- The substrate temperature must be at least 5°F (3°C) above dew point.
- Premature exposure to early condensation and rain may cause color and gloss change.

INSTRUCTIONS FOR USE -

Ratio : base to hardener 8 : 1 by volume.

- Contact your Sigma Coatings representative for recommendations concerning specific requirements.
- The temperature of the paint should be above 59°F (15°C) otherwise extra thinning may be required to obtain application viscosity. Too much thinner results in reduced sag resistance and slower cure.
- Thinner if required should only be added after mixing the components.

Substrate Temperature

Must be above 41°F (5°C)

Relative Humidity

Should not exceed 80% during application and curing.

AIRLESS SPRAY

Recommended thinner

91 - 88 (Flash Point 80°F (27°C))

Volume of thinner

0 – 5%

Tip size

0.011 – 0.013 inch (approximately 0.28 – 0.33 mm)

Tip pressure

1800 – 2200 p.s.i (approximately 122 – 150 atm.)

Hose should be 3/8" I.D. minimum, but a short 1/4" whip end section may be used to ease application. A maximum hose length of 100 feet is suggested.

CONVENTIONAL SPRAY

Recommended thinner

91 - 88 (Flash Point 80°F (27°C))

Volume of thinner

5 – 10%

Tip air cap

DeVilbiss 704E or Binks 66PE

Gun Model

DeVilbiss MBC or JGA, Binks #18 or #62

Fluid hose should be 3/8" I.D. with a maximum length of 50 feet. Pot should always have dual regulation and be kept at same elevation as spray gun.

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BRUSH/ROLLER

Recommended thinner 91 - 88 (Flash Point 80°F (27°C))
 Volume of thinner 0 – 3%

Power or hand roll with 3/8” nap roller. Double roll technique will produce the most uniform appearance. Two coats may be required.

CLEANING SOLVENT 91 - 88 (Flash Point 80°F (27°C))

SAFETY PRECAUTIONS

This product is offered for sale and use only to PROFESSIONALLY TRAINED INDUSTRIAL PERSONNEL. It is NOT FOR RESIDENTIAL USE. This product contains flammable solvents and/or other hazardous ingredients and must be used with caution. Observe all health and safety precautions as listed on the Material Safety Data Sheet during storage and handling, application, drying and disposal. DO NOT ATTEMPT TO USE THIS PRODUCT WITHOUT CONSULTING THE CURRENT “MATERIAL SAFETY DATA SHEET”. Material Safety Data Sheets are available from the Customer Service Department at SigmaKalon USA (713-355-3333)

ADDITIONAL DATA

Overcoating table (with self)

Substrate Temperature	59°F (15°C)	68°F (20°C)	77°F (25°C)	86°F (30°C)
Minimum Interval	12 hours	8 hours	6 hours	4 hours
Maximum Interval	Unlimited			

Curing table

substrate temperature	touch dry	dry to handle	full cure
59°F (15°C)	8 hours	12 hours	14 days
68°F (20°C)	6 hours	8 hours	9 days
77°F (25°C)	4 hours	6 hours	6 days
86°F (30°C)	2 hours	4 hours	3 days

Adequate ventilation is essential during application and curing

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Worldwide availability

While it is the aim of Sigma Coatings to supply the same product on a worldwide basis, slight local modifications can be necessary to comply with legislation or special circumstances. In such situations an alternative product data sheet is published.

Limitation of Liability - The information in this data sheet is based upon laboratory tests we believe to be accurate and is intended for guidance only. All recommendations or suggestions relating to the use of the products made by Sigma Coatings, whether in technical documentation, or in response to a specific enquiry, or otherwise, are based on data which to the best of our knowledge are reliable. The products and information are designed for users having the requisite knowledge and industrial skills and it is the end-user's responsibility to determine the suitability of the product for its intended use.

Sigma Coatings has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. Sigma Coatings does therefore not accept any liability arising from loss, injury or damage resulting from such use or the contents of this data sheet (unless there are written agreements stating otherwise).

The data contained herein are liable to modification as a result of practical experience and continuous product development.

This data sheet replaces and annuls all previous issues and it is therefore the user's responsibility to ensure that this sheet is current prior to using the product.

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