

# SIGMADUR™ 595 Y

(SIGMACAP HS PU 595)

## DESCRIPTION

Two-component high solids aliphatic acrylic polyurethane finish

## PRINCIPAL CHARACTERISTICS

- Excellent resistance to atmospheric exposure conditions
- Good color and gloss retention
- Resistant to splash of mineral and vegetable oils, paraffins, aliphatic petroleum products and mild chemicals
- Can be recoated even after long atmospheric exposure
- VOC values, as supplied, are LEED compliant

## COLOR AND GLOSS LEVEL

- White and various other colors on request
- Gloss

## BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.5 kg/l (12.1 lb/US gal)
Volume solids	76 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 168.0 g/kg
Recommended dry film thickness	50 - 100 µm (2.0 - 4.0 mils) depending on system
Theoretical spreading rate	15.2 m <sup>2</sup> /l for 50 µm (610 ft <sup>2</sup> /US gal for 2.0 mils) 7.6 m <sup>2</sup> /l for 100 µm (305 ft <sup>2</sup> /US gal for 4.0 mils)
Overcoating Interval	Minimum: 10 hours Maximum: 3 months
Full cure after	7 days
Shelf life	Base: at least 12 months when stored cool and dry Hardener: at least 12 months when stored cool and dry

### Notes:

- See ADDITIONAL DATA - Spreading rate and film thickness
- See ADDITIONAL DATA - Overcoating intervals
- See ADDITIONAL DATA - Curing time

## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

### Substrate conditions

- Previous coat (epoxy or polyurethane) dry and free from any contamination and sufficiently roughened if necessary



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## **Substrate temperature and application conditions**

- Substrate temperature during application and curing should be at least 3°C (5°F) above dew point
- Substrate temperature during application and curing should be above 5°C (41°F)
- Relative humidity during application and curing should not exceed 85%
- Premature exposure to early condensation and rain may cause color and gloss change

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## **INSTRUCTIONS FOR USE**

### **Mixing ratio by volume: base to hardener 88:12**

- The temperature of the mixed base and hardener should be above 10°C (50°F), otherwise extra thinner may be required to obtain application viscosity
- Mix thoroughly before application
- Adding too much thinner results in reduced sag resistance
- Thinner should be added after mixing the components

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### **Induction time**

None

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### **Pot life**

2.5 hours at 20°C (68°F)

Note: See ADDITIONAL DATA – Pot life

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### **Air spray**

#### **Recommended thinner**

THINNER 91-86

#### **Volume of thinner**

0 - 10%, depending on required thickness and application conditions

#### **Nozzle orifice**

1.0 - 1.5 mm (approx. 0.040 - 0.060 in)

#### **Nozzle pressure**

0.3 - 0.4 MPa (approx. 3 - 4 bar; 44 - 58 p.s.i.)

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## Airless spray

### Recommended thinner

THINNER 91-86

### Volume of thinner

0 - 10%, depending on required thickness and application conditions

### Nozzle orifice

0.015 - 0.019 in (approx. 0.38 - 0.48 mm)

### Nozzle pressure

20.0 MPa (approx. 200 bar; 2901 p.s.i.)

## Brush/roller

### Recommended thinner

THINNER 91-86

### Volume of thinner

0 - 5%

## ADDITIONAL DATA

Spreading rate and film thickness	
DFT	Theoretical spreading rate
50 µm (2.0 mils)	15.2 m <sup>2</sup> /l (610 ft <sup>2</sup> /US gal)
75 µm (3.0 mils)	10.1 m <sup>2</sup> /l (406 ft <sup>2</sup> /US gal)
100 µm (4.0 mils)	7.6 m <sup>2</sup> /l (305 ft <sup>2</sup> /US gal)

Overcoating interval for DFT up to 100 µm (4.0 mils)					
Overcoating with...	Interval	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
itself and two-component polyurethane finishes	Minimum	24 hours	10 hours	8 hours	6 hours
	Maximum	3 months	3 months	3 months	3 months

Note: Surface should be dry and free from any contamination

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Curing time for DFT up to 100 μm (4.0 mils)			
Substrate temperature	Dry to touch	Dry to handle	Full cure
10°C (50°F)	5 hours	20 hours	10 days
20°C (68°F)	3 hours	12 hours	7 days
30°C (86°F)	2 hours	6 hours	4 days
40°C (104°F)	1 hour	3 hours	3 days

**Notes:**

- Adequate ventilation must be maintained during application and curing (please refer to INFORMATION SHEETS 1433 and 1434)
- Premature exposure to early condensation and rain may cause color and gloss change

Pot life (at application viscosity)	
Mixed product temperature	Pot life
20°C (68°F)	2.5 hours
30°C (86°F)	2 hours
40°C (104°F)	1.5 hours

## SAFETY PRECAUTIONS

- For paint and recommended thinners see INFORMATION SHEETS 1430, 1431 and relevant Material Safety Data Sheets
- This is a solvent-borne paint and care should be taken to avoid inhalation of spray mist or vapor, as well as contact between the wet paint and exposed skin or eyes
- Contains a toxic polyisocyanate curing agent
- Avoid at all times inhalation of aerosol spray mist

## REFERENCES

• CONVERSION TABLES	INFORMATION SHEET	1410
• EXPLANATION TO PRODUCT DATA SHEETS	INFORMATION SHEET	1411
• SAFETY INDICATIONS	INFORMATION SHEET	1430
• SAFETY IN CONFINED SPACES AND HEALTH SAFETY, EXPLOSION HAZARD – TOXIC HAZARD	INFORMATION SHEET	1431
• SAFE WORKING IN CONFINED SPACES	INFORMATION SHEET	1433
• DIRECTIVES FOR VENTILATION PRACTICE	INFORMATION SHEET	1434
• RELATIVE HUMIDITY – SUBSTRATE TEMPERATURE – AIR TEMPERATURE	INFORMATION SHEET	1650

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