

# SIGMADUR™ 550 Y

## DESCRIPTION

Two-component, high solids acrylic aliphatic polyurethane finish

## PRINCIPAL CHARACTERISTICS

- Finish coat for (anti-corrosive) coating systems on steel and concrete structures in atmospheric exposure conditions
- Good UV resistance
- Excellent color and gloss retention
- Good impact and abrasion resistance
- Long potlife at elevated temperatures
- Resistant to splash and spillage of mild chemicals and solvents
- High elasticity

## 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	1.3 kg/l (10.7 lb/US gal)
Volume solids	64 ± 2%
Recommended dry film thickness	50 - 75 µm (2.0 - 3.0 mils) depending on system
Theoretical spreading rate	12.8 m <sup>2</sup> /l for 50 µm (513 ft <sup>2</sup> /US gal for 2.0 mils)
Dry to touch	1 hour
Overcoating Interval	Minimum: 12 hours Maximum: Unlimited
Full cure after	8 days
Shelf life	Base: at least 24 months when stored cool and dry Hardener: at least 24 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) must be dry and free from any contamination
- Previous coat: surface should be sufficiently roughened if necessary



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## **Substrate temperature and application conditions**

- Substrate temperature during application and curing should be above 5°C (41°F)
  - Substrate temperature during application and curing should be at least 3°C (5°F) above dew point
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## **INSTRUCTIONS FOR USE**

### **Mixing ratio by volume: base to hardener 92:8**

- 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
  - 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**

5 hours at 20°C (68°F)

Note: See ADDITIONAL DATA – Pot life

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### **Air spray**

#### **Recommended thinner**

THINNER 21-06

#### **Volume of thinner**

5 - 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 21-06

### Volume of thinner

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

### Nozzle orifice

Approx. 0.33 – 0.38 mm (0.013 – 0.015 in)

### Nozzle pressure

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

## Brush/roller

### Recommended thinner

THINNER 21-22 (preferred) or THINNER 21-06

### Volume of thinner

0 – 5%

## Cleaning solvent

THINNER 90-53

## ADDITIONAL DATA

Spreading rate and film thickness	
DFT	Theoretical spreading rate
50 µm (2.0 mils)	12.8 m <sup>2</sup> /l (513 ft <sup>2</sup> /US gal)
60 µm (2.4 mils)	10.7 m <sup>2</sup> /l (428 ft <sup>2</sup> /US gal)
75 µm (3.0 mils)	8.5 m <sup>2</sup> /l (342 ft <sup>2</sup> /US gal)

Overcoating interval for DFT up to 75 µm (3.0 mils)					
Overcoating with...	Interval	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
itself	Minimum	24 hours	12 hours	10 hours	8 hours
	Maximum	Unlimited	Unlimited	Unlimited	Unlimited

Note: This product has an unlimited overcoating interval provided the surface is free from chalking and other contaminations

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## Curing time for DFT up to 75 µm (3.0 mils)

Substrate temperature	Dry to touch	Dry to handle	Full cure
20°C (68°F)	1 hour	8 hours	8 days
30°C (86°F)	45 minutes	6 hours	5 days
40°C (104°F)	30 minutes	4 hours	3 days

### Notes:

- Adequate ventilation must be maintained during application and curing
- 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)	5 hours
30°C (86°F)	3 hours
40°C (104°F)	2 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

## WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective and Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.

## REFERENCES

• 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
• CLEANING OF STEEL AND REMOVAL OF RUST	INFORMATION SHEET	1490



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