## SIGMATHERM™ 350

## DESCRIPTION

Heat-resistant silicone/acrylic finish

## PRINCIPAL CHARACTERISTICS

- Excellent resistance against weathering
- A minimum drying time of 3 days at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ should be allowed before exposure to heat
- Heat-resistant up to $350^{\circ} \mathrm{C}\left(660^{\circ} \mathrm{F}\right)$
- To be used for the internal and external protection of steel surfaces
- Widely compatible with inorganic zinc primers


## COLOR AND GLOSS LEVEL

- White, aluminum (other colors available on request)
- Semi-gloss

BASIC DATA AT $\mathbf{2 0}^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$

| Data for product |  |
| :---: | :---: |
| Number of components | One |
| Mass density | White: $1.2 \mathrm{~kg} / \mathrm{l}(10.0 \mathrm{lb} / \mathrm{US}$ gal) <br> Aluminum: $1.1 \mathrm{~kg} / \mathrm{l}(9.2 \mathrm{lb} / \mathrm{US}$ gal) |
| Volume solids | White: $39 \pm 2 \%$ <br> Aluminum: $42 \pm 2 \%$ |
| VOC (Supplied) | Directive 1999/13/EC, SED: max. $492 \mathrm{~g} / \mathrm{kg}$ (white) Directive 1999/13/EC, SED: max. $491 \mathrm{~g} / \mathrm{kg}$ (aluminum) max. $590.0 \mathrm{~g} / \mathrm{l}$ (approx. $4.9 \mathrm{lb} / \mathrm{gal}$ ) (white) max. $540.0 \mathrm{~g} / \mathrm{l}$ (approx. $4.5 \mathrm{lb} / \mathrm{gal})$ (aluminum) |
| Recommended dry film thickness | 25-30 $\mu \mathrm{m}$ ( $1.0-1.2 \mathrm{mils}$ ) |
| Theoretical spreading rate | White: $15.6 \mathrm{~m}^{2} / \mathrm{l}$ for $25 \mu \mathrm{~m}\left(626 \mathrm{ft}^{2} / \mathrm{US}\right.$ gal for 1.0 mils$)$ Aluminum: $16.8 \mathrm{~m}^{2} / /$ for $25 \mu \mathrm{~m}$ ( $674 \mathrm{ft}^{2} / \mathrm{US}$ gal for 1.0 mils) |
| Dry to touch | 1 hour |
| Overcoating Interval | Minimum: 18 hours <br> Maximum: Unlimited |
| Shelf life | At least 24 months when stored cool and dry |

## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

## Substrate conditions

- Thermal aluminum sprayed steel or thermal zinc sprayed steel must be dry and free from any contamination
- Suitable coating (zinc silicate primer) must be dry, free from any contamination and zinc salts
- Steel; blast cleaned to a minimum of ISO-Sa2 $1 / 2$, blasting profile $40-70 \mu \mathrm{~m}$ ( $1.6-2.8$ mils)


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## Substrate temperature and application conditions

- Substrate temperature during application should be at least $3^{\circ} \mathrm{C}\left(5^{\circ} \mathrm{F}\right)$ above dew point


## INSTRUCTIONS FOR USE

- By using a mist coat technique, it is possible to apply SIGMATHERM 350 on top of a zinc silicate primer
- Power agitate to uniform consistency


## Air spray

Recommended thinner
No thinner should be added

Nozzle orifice
1.5 - 2.0 mm (approx. $0.060-0.079 \mathrm{in})$

## Nozzle pressure

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

## Airless spray

Recommended thinner
No thinner should be added

Nozzle orifice
Approx. 0.38 - 0.48 mm (0.015-0.019 in)

Nozzle pressure
12.0-15.0 MPa (approx. 120-150 bar; 1741-2176 p.s.i.)

## Brush/roller

- Only for touch-up and spot repair

Cleaning solvent
THINNER 21-06

## ADDITIONAL DATA

| Spreading rate and film thickness - White |
| :--- |
| DFT |
| $25 \mu \mathrm{~m}(1.0$ mils $)$ |
| $30 \mu \mathrm{~m}(1.2$ mils $)$ |
| $15.6 \mathrm{~m}^{2} / /\left(626 \mathrm{ft}^{2} / \mathrm{US}\right.$ gal $)$ |

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| Spreading rate and film thickness - Aluminum |  |
| :--- | :--- |
| DFT | Theoretical spreading rate |
| $25 \mu \mathrm{~m}(1.0$ mils $)$ | $16.8 \mathrm{~m}^{2} / \mathrm{l}\left(674 \mathrm{ft}^{2} / \mathrm{US}\right.$ gal $)$ |
| $30 \mu \mathrm{~m}(1.2$ mils $)$ | $14.0 \mathrm{~m}^{2} / \mathrm{l}\left(561 \mathrm{ft}^{2} / \mathrm{US}\right.$ gal $)$ |

## Overcoating interval for DFT up to $30 \mu \mathrm{~m}$ ( 1.2 mils )

| Overcoating with... | Interval | $10^{\circ} \mathrm{C}\left(50^{\circ} \mathrm{F}\right)$ | $\mathbf{2 0 ^ { \circ } \mathrm { C } ( 6 8 { } ^ { \circ } \mathrm { F } )}$ | $\mathbf{3 0 ^ { \circ } \mathrm { C } ( 8 6 ^ { \circ } \mathrm { F } )}$ | $40^{\circ} \mathrm{C}\left(104^{\circ} \mathrm{F}\right)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| itself | Minimum | 24 hours | 18 hours | 15 hours | 10 hours |
|  | Maximum | Unlimited | Unlimited | Unlimited | Unlimited |

Note: Surface should be dry and free from any contamination

| Curing time for DFT up to $30 \boldsymbol{\mu m}$ ( 1.2 mils) |  |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Substrate temperature | Dry to touch | Dry to handle |  |  |  |
| $10^{\circ} \mathrm{C}\left(50^{\circ} \mathrm{F}\right)$ | 1.5 hours | 3 hours |  |  |  |
| $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ | 1 hour | 2 hours |  |  |  |
| $30^{\circ} \mathrm{C}\left(86^{\circ} \mathrm{F}\right)$ | 45 minutes | 1.5 hours |  |  |  |
| $40^{\circ} \mathrm{C}\left(104^{\circ} \mathrm{F}\right)$ | 30 minutes | 1 hour |  |  |  |

Note: Adequate ventilation must be maintained during application and curing (please refer to INFORMATION SHEETS 1433 and 1434)

## 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


## 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.

## SIGMATHERM™ 350

## REFERENCES

- CONVERSION TABLES

INFORMATION SHEET

- EXPLANATION TO PRODUCT DATA SHEETS

INFORMATION SHEET

- SAFETY INDICATIONS

INFORMATION SHEET

- SAFETY IN CONFINED SPACES AND HEALTH SAFETY, EXPLOSION HAZARD -

INFORMATION SHEET

- RELATIVE HUMIDITY - SUBSTRATE TEMPERATURE - AIR TEMPERATURE


#### Abstract

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