DESCRIPTION

Two-component, moisture-curing, zinc (ethyl) silicate prefabrication primer

PRINCIPAL CHARACTERISTICS

- · Used as a weldable preconstruction primer or field or shop applied primer
- Excellent corrosion resistance
- · Permits almost immediate handling, welding, cutting and fabricating
- · Excellent thermal stability minimizes heat damage during hot work procedures
- Suitable for automatic and manual application

COLOR AND GLOSS LEVEL

- Gray
- Flat

BASIC DATA AT 20°C (68°F)

Data for mixed product				
Number of components	Two			
Mass density	2.1 kg/l (17.5 lb/US gal)			
Volume solids	38 ± 2%			
VOC (Supplied)	Directive 1999/13/EC, SED: max. 299.0 g/kg UK PG 6/23(92) Appendix 3: max. 607.0 g/l (approx. 5.1 lb/US gal)			
Recommended dry film thickness	15 - 40 μm (0.6 - 1.6 mils)			
Theoretical spreading rate	19.0 m²/l for 20 μm (762 ft²/US gal for 0.8 mils)			
Dry to touch	2 minutes			
Overcoating Interval	Minimum: 16 hours Maximum: 9 months			
Shelf life	Binder: at least 6 months when stored cool and dry Paste: at least 12 months when stored cool and dry			

Notes:

- See ADDITIONAL DATA Overcoating intervals
- See ADDITIONAL DATA Curing time

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Substrate conditions

- Steel; blast cleaned to ISO Sa 2¹/₂ or SSPC-SP-10, blasting profile 25 50 μm (1.0 2.0 mils)
- Surface must be dry and free from any contamination

Note: Apply primer as soon as possible after surface preparation to prevent any contamination.



Substrate temperature and application conditions

- Surface temperature during application should be between 0°C (32°F) and 55°C (131°F)
- Surface temperature during application should be at least 3°C (5°F) above dew point
- Substrate temperature during automatic application at 30°C (86°F) is recommended
- Ambient temperature during application and curing should be between 0°C (32°F) and 50°C (122°F)
- Relative humidity during curing should be between 50% and 95%

SYSTEM SPECIFICATION

- Apply 15-20 microns (0.6-0.8 mils) when used as preconstruction primer
- Apply 40 microns (1.6 mils) when used as permanent primer

INSTRUCTIONS FOR USE

Mixing ratio by volume: base to hardener 50:50 (1:1)

- The temperature of the mixture of binder and paste should preferably be above 15°C (59°F)
- Stir the paste thoroughly before adding the binder
- Gradually add one-third of the binder to the pigment paste
- Stir thoroughly until homogeneous
- · Add remaining binder and continue stirring until the mixture is homogeneous
- Mixed paint is ready for use
- Some addition of thinner (THINNER 40-25) might be necessary depending on routing, line speed and steel temperature
- Agitate continuously during application

Pot life

8 hours at 20°C (68°F)

Air spray

Recommended thinner

THINNER 40-25

Volume of thinner

0 - 20%, depending on required thickness and application conditions

Nozzle orifice

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

Nozzle pressure

0.3 MPa (approx. 3 Bar; 44 p.s.i.)



Airless spray

Recommended thinner THINNER 40-25

Volume of thinner

0 - 20%, depending on required thickness and application conditions

Nozzle orifice

Approx. 0.48 - 0.64 mm (0.019 - 0.025 in)

Nozzle pressure

8.0 - 12.0 MPa (approx. 80 - 120 bar; 1161 - 1741 p.s.i.)

Cleaning solvent

THINNER 90-53 or THINNER 90-58

ADDITIONAL DATA

Overcoating interval for DFT up to 20 μm (0.8 mils)						
Overcoating with	Interval	10°C (50°F)	20°C (68°F)			
itself and various two- pack epoxy coatings	Minimum Maximum	24 hours 10 months	16 hours 9 months			

Notes:

- Curing/recoating time will be shortened by the increase of humidity, please contact regional technical service team for details
- Zinc containing primers can form zinc salts on the surface; preferably they should not be weathered for long periods before overcoating
- Before overcoating, ensure surface is clean and free from zinc salts and other contamination
- A mist coat / full coating application technique is required when topcoating to prevent application bubbling. Ensure dry spray is removed from the surface

Curing time for DFT up to 20 μm (0.8 mil)				
Substrate temperature	Dry to touch	Dry to handle		
10°C (50°F)	4 minutes	10 minutes		
20°C (68°F)	1 minute - 2 minutes	2 minutes - 4 minutes		

Notes:

- Drying times are dependent on air and surface temperatures as well as film thickness, ventilation and relative humidity
- Adequate ventilation must be maintained during application and curing

SAFETY PRECAUTIONS

• 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.

REFERENCES

•	EXPLANATION TO PRODUCT DATA SHEETS	INFORMATION SHEET	1411
•	SAFETY INDICATIONS	INFORMATION SHEET	1430
•	SAFETY IN CONFINED SPACES AND HEALTH SAFETY, EXPLOSION HAZARD –	INFORMATION SHEET	1431
	TOXIC HAZARD		
•	CLEANING OF STEEL AND REMOVAL OF RUST	INFORMATION SHEET	1490
•	RELATIVE HUMIDITY – SUBSTRATE TEMPERATURE – AIR TEMPERATURE	INFORMATION SHEET	1650

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