SIGMAWELD 10

3 pages

October 2009
Revision of April 2007

DESCRIPTION

fast drying one component water borne anticorrosive shop primer

PRINCIPAL CHARACTERISTICS

- suitable for automatic application on shot blasted steel plates
- good cutting and welding properties (electrodes)
- provides corrosion protection up to 6 months, when applied at a dft of 30 µm (depending on exposure conditions and blasting profile)
- fast drying properties
- can be used as a first coat in various paint systems for atmospheric exposure conditions only
- reduced explosion risk and fire hazard

COLOURS AND GLOSS

redbrown - flat

BASIC DATA AT 20°C

(1 g/cm³ = 8.25 lb/US gal; 1 m²/l = 40.7 ft²/US gal)

Mass density	1.4 g/cm³
Volume solids	41 ± 2%
VOC (supplied)	max. 12 g/kg (Directive 1999/13/EC, SED) max. 17 g/l (approx. 0.1 lb/gal)
Recommended dry film thickness	30 µm
Theoretical spreading rate	13.7 m²/l
Touch dry after	12 min. at substrate temperature of 20°C 3 min. at substrate temperature of 40°C + ventilation
Overcoating interval	min. 12 hours max. 6 months longer overcoating intervals can be permitted when primer is still in sound condition
Shelf life (cool and dry place)	at least 6 months

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- steel; shot blast cleaned to ISO-Sa2½, blasting profile 40 - 70 µm
- for automatic application a substrate temperature between 35 - 40°C is recommended
- substrate temperature should be at least 3°C above dew point
- adequate ventilation is required
- preferably relative humidity should not exceed 75% or the drying and performance of the coating will be adversely affected

SECONDARY SURFACE PREPARATION

- during storage and construction, contamination of the prefabrication primer should be limited
- after fabrication, surface defects should be treated according to the scheme below

contamination	**to be removed**
weldseams	SPSS-Pt2
burned areas	SPSS-Ss (SPSS-Pt2)
damaged corroded areas	SPSS-Ss (SPSS-Pt2)

SIGMAWELD 10

October 2009

INSTRUCTIONS FOR USE

- some addition of water might be necessary depending on routing, line speed and steel temperature
- stir well before use
- the temperature of the paint should be above 15°C
- strain mixture through a 30 - 60 mesh screen
- agitate continuously during application
- must be protected from freezing at all times during storage and/or transport

AIRLESS SPRAY

Recommended thinner	tap water
Volume of thinner	0 - 5%, depending on required thickness and application conditions
Nozzle orifice	approx. 0.43 - 0.58 mm (= 0.017 - 0.023 in)
Nozzle pressure	12 - 15 MPa (= approx. 120 - 150 bar; 1700 - 2130 p.s.i.)

AIR SPRAY

Recommended thinner	tap water
Volume of thinner	0 - 5%, depending on required thickness and application conditions
Nozzle orifice	1 - 1.5 mm
Nozzle pressure	0.2 - 0.3 MPa (= approx. 2 - 3 bar; 28 - 43 p.s.i.)

CLEANING SOLVENT

tap water and Thinner 70-05

Cleaning Procedures of the spray equipment:
pulsator filter and tip filter must be taken out of the equipment and cleaned properly

following tables illustrate the cleaning procedure of the spray equipment when changing spraying from solvent borne paint to water borne paints (table 1) and from water borne paints to solvent borne paints (table 2)

CLEANING PROCEDURE

Table 1: from solvent borne- to water borne paints

1st cleaning	with Thinner 90-53
2nd cleaning	with Thinner 70-05
3rd cleaning	with warm tap water (30 - 35°C) after which water borne paints can be sprayed

Table 2: from water borne- to solvent borne paints

1st cleaning	with warm tap water (30 - 35°C)
2nd cleaning	with Thinner 70-05
3rd cleaning	with Thinner 90-53

Thinner 70-05 can be re-used

SIGMAWELD 10

October 2009

SAFETY PRECAUTIONS

for paint and recommended thinners see safety sheets 1430, 1431 and relevant material safety data sheets

although this is a water borne paint, care should be taken to avoid inhalation of spray mist or vapour as well as contact between the wet paint and exposed skin or eyes

Worldwide availability

Whilst it is always the aim of PPG Protective & Marine Coatings to supply the same product on a worldwide basis, 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	see information sheet 1411
Safety indications	see information sheet 1430
Safety in confined spaces and health safety	
Explosion hazard - toxic hazard	see information sheet 1431
Cleaning of steel and removal of rust	see information sheet 1490

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