SIGMALINE™ 855

DESCRIPTION

Two-component, solvent-free polyurethane coating

PRINCIPAL CHARACTERISTICS

- Solvent-free coating for the protection of external of pipelines and underground storage tanks
- Certified to GBE/CW6 Part 1, meets EN10290
- Excellent corrosion resistance
- Fast-curing
- Good abrasion and impact resistance
- Excellent adhesion
- Good water resistance

COLOR AND GLOSS LEVEL

- Blue, gray, redbrown
- Gloss

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.7 kg/l (14.2 lb/US gal)
Volume solids	100%
VOC (Supplied)	Directive 2010/75/EU, SED: max. 1 g/kg (RAL 9006) max. 2.0 g/l (approx. 0.0 lb/US gal)
Recommended dry film thickness	500 - 1500 µm (20.0 - 60.0 mils) depending on requirements
Theoretical spreading rate	2.0 m^2/l for 500 µm (80 ft^2/US gal for 20.0 mils) 0.7 m^2/l for 1500 µm (27 ft^2/US gal for 60.0 mils)
Dry to touch	30 minutes
Full cure after	4 days
Shelf life	Base: at least 12 months when stored cool and dry Hardener: at least 6 months when stored cool and dry

Notes:

- See ADDITIONAL DATA – Spreading rate and film thickness
- See ADDITIONAL DATA – Curing time

SIGMALINE™ 855

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Atmospheric exposure conditions

- For atmospheric exposure a topcoat of SIGMADUR 520 is recommended

Substrate temperature and application conditions

- Steel; blast cleaned to ISO-Sa2½, blasting profile 40 – 70 µm (1.6 – 2.8 mils)
- Recommended substrate temperature during application is between 10°C (50°F) to 50°C (122°F) and max. allowing temperature is 60°C (140°F)
- The substrate temperature must be at least 3°C(5°F) above dew point

INSTRUCTIONS FOR USE

Mixing ratio by volume: base to hardener 4:1

- Application with twin-feed hot airless spray equipment
- No thinner should be added

Application

- For a good intercoat adhesion it is necessary that a coated surface which should be repaired or completely recoated is roughened up by means of sweep blasting or abrading
- For manual repaint of small damages special repair sets are available called: "SIGMALINE 855 REPAIR", Product Data Sheet (7655RP)

Induction time

0 minute

Note:

- No induction time required

Pot life

1 minute at 60°C (140°F)

Note:

- See ADDITIONAL DATA – Pot life

SIGMALINE™ 855

Airless spray

- Twin-feed, hot airless spray
- Pumping viscosity is achieved at 40°C (104°F) to 60°C (140°F)
- Temperature in the mixing unit must be between 55°C (131°F) to 65°C (149°F)

Recommended thinner

No thinner should be added

Nozzle orifice

Approx. 0.58 – 0.79 mm (0.023 – 0.031 in)

Nozzle pressure

15.0 MPa (approx. 150 bar; 2176 p.s.i.)

Cleaning solvent

- THINNER 91-83

CLEANING PROCEDURE

- Mixed material will become insoluble within a few minutes after mixing at 60°C (140°F)
- Parts of the spraying equipment containing mixed base and hardener must be cleaned immediately after completion of the job or during any interruption

---

ADDITIONAL DATA

Spreading rate and film thickness	
DFT	**Theoretical spreading rate**
500 µm (20.0 mils)	2.0 m^2/l (80 ft^2/US gal)
1000 µm (40.0 mils)	1.0 m^2/l (40 ft^2/US gal)
1500 µm (60.0 mils)	0.7 m^2/l (27 ft^2/US gal)

Note:

- Maximum DFT when brushing: 250 µm (10.0 mils)

SIGMALINE™ 855

Curing time for DFT up to 1500 µm (60.0 mils)			
Substrate temperature	**Dry to touch**	**Dry to handle**	**Full cure**
0°C (32°F)	3.5 hours	7 hours	12 days
5°C (41°F)	2 hours	4 hours	10 days
10°C (50°F)	1.5 hours	3 hours	8 days
15°C (59°F)	1 hour	1.5 hours	6 days
20°C (68°F)	30 minutes	1 hour	4 days
30°C (86°F)	15 minutes	30 minutes	48 hours
40°C (104°F)	6 minutes	15 minutes	24 hours
50°C (122°F)	3 minutes	6 minutes	12 hours

Note:

- Adequate ventilation must be maintained during application and curing

Pot life (at application viscosity)	
Mixed product temperature	**Pot life**
20°C (68°F)	5 minutes
50°C (122°F)	2 minutes
60°C (140°F)	1 minute
70°C (158°F)	30 seconds

SAFETY PRECAUTIONS

- Although this is a solvent-free paint, care should be taken to avoid inhalation of spray mist, as well as contact between the wet paint and exposed skin or eyes
- See Safety Data Sheet and product label for complete safety and precaution requirements
- Ventilation should be provided in confined spaces to maintain good visibility

WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective & 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

- Information sheet | Explanation of product data sheets

SIGMALINE™ 855

WARRANTY

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

LIMITATIONS OF LIABILITY

IN NO EVENT WILL PPG BE LIABLE UNDER ANY THEORY OF RECOVERY (WHETHER BASED ON NEGLIGENCE OF ANY KIND, STRICT LIABILITY OR TORT) FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO, ARISING FROM, OR RESULTING FROM ANY USE MADE OF THE PRODUCT. The information in this sheet is intended for guidance only and is based upon laboratory tests that PPG believes to be reliable. PPG may modify the information contained herein at any time as a result of practical experience and continuous product development. All recommendations or suggestions relating to the use of the PPG product, whether in technical documentation, or in response to a specific inquiry, or otherwise, are based on data, which to the best of PPG's knowledge, is reliable. The product and related information is designed for users having the requisite knowledge and industrial skills in the industry and it is the end-user's responsibility to determine the suitability of the product for its own particular use and it shall be deemed that Buyer has done so, as its sole discretion and risk. PPG has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. Therefore, PPG does not accept any liability arising from any loss, injury or damage resulting from such use or the contents of this information (unless there are written agreements stating otherwise). Variations in the application environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. This sheet supersedes all previous versions and it is the Buyer's responsibility to ensure that this information is current prior to using the product. Current sheets for all PPG Protective & Marine Coatings Products are maintained at www.ppgpmc.com. The English text of this sheet shall prevail over any translation thereof.