

SIGMAGUARD 790

4 pages

April 2009
Revision of January 2007

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| DESCRIPTION | two component reinforced high solids polyamine adduct cured epoxy coating |
| PRINCIPAL CHARACTERISTICS | <ul style="list-style-type: none"> - excellent water and chemical resistance - suitable for waste water of pH 2-10 - good abrasion resistance particularly to waste water slurries - easy to clean - UV exposure may adversely affect colour and gloss |
| COLOURS AND GLOSS | greenish grey - gloss |
| BASIC DATA AT 20°C | (1 g/cm ³ = 8.25 lb/US gal; 1 m ² /l = 40.7 ft ² /US gal) (data for mixed product) |
| Mass density | 1.5 g/cm ³ |
| Volume solids | 86 ± 2% |
| VOC (supplied) | max. 139 g/kg (Directive 1999/13/EC, SED) max. 215 g/l (approx. 1.8 lb/gal) |
| Recommended dry film thickness | 150 - 250 µm |
| Theoretical spreading rate | 5.7 m ² /l for 150 µm |
| Touch dry after | 3 - 4 hours |
| Overcoating interval | min. 16 hours * max. 5 days * |
| Full cure after | 10 days * |
| | (data for components) |
| Shelf life (cool and dry place) | at least 12 months * see additional data |
| RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES | <ul style="list-style-type: none"> - suitable primer; (Phenguard 930 preferred for waste water exposure) - dry and free from any contamination - substrate temperature should be above 5°C and at least 3°C above dew point |
| INSTRUCTIONS FOR USE | <p>mixing ratio by volume: base to hardener 77 : 23</p> <ul style="list-style-type: none"> - the temperature of the mixed base and hardener should preferably be above 15°C, otherwise extra solvent may be required to obtain application viscosity - too much solvent results in reduced sag resistance - thinner should be added after mixing the components |
| Induction time | none |
| Pot life | 3 hours at 20°C * * see additional data |

SIGMAGUARD 790

April 2009

AIRLESS SPRAY

Recommended thinner Thinner 91-92
 Volume of thinner 5 - 10%, depending on required thickness and application conditions
 Nozzle orifice approx. 0.53 mm (= 0.021 in)
 Nozzle pressure 15 MPa (= approx. 150 bar; 2130 p.s.i.)

AIR SPRAY

Recommended thinner Thinner 91-92
 Volume of thinner 10 - 15%, depending on required thickness and application conditions
 Nozzle orifice 1.5 - 2 mm
 Nozzle pressure 0.3 MPa (= approx. 3 bar; 43 p.s.i.)

BRUSH

Recommended thinner max. dft 75 µm
 Thinner 91-92
 Volume of thinner 0 - 5%

CLEANING SOLVENT

Thinner 90-53

SAFETY PRECAUTIONS

for paint and recommended thinners see safety 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 vapour as well as contact between the wet paint and exposed skin or eyes

ADDITIONAL DATA

Film thickness and spreading rate

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|--|-----|-----|
| theoretical spreading rate m ² /l | 5.7 | 3.4 |
| dft in µm | 150 | 250 |

Overcoating table for SigmaGuard 790 for dft up to 150 µm

| substrate temperature | 5°C | 10°C | 20°C | 30°C | 40°C |
|-----------------------|---------|--------|----------|----------|---------|
| minimum interval | 4 days | 2 days | 16 hours | 10 hours | 8 hours |
| maximum interval | 14 days | 7 days | 5 days | 2 days | 2 days |

– surface should be dry and free from any contamination

SIGMAGUARD 790

April 2009

Curing table for dft up to 150 µm

| substrate temperature | dry to handle | full cure |
|-----------------------|---------------|-----------|
| 5°C | 5 days | 21 days |
| 10°C | 2 days | 15 days |
| 20°C | 16 hours | 10 days |
| 30°C | 10 hours | 5 days |
| 40°C | 8 hours | 3 days |

- adequate ventilation must be maintained during application and curing (please refer to sheets 1433 and 1434)

Pot life (at application viscosity)

| | |
|------|----------|
| 15°C | 4 hours |
| 20°C | 3 hours |
| 25°C | 2 hours |
| 30°C | 1.5 hour |
| 40°C | 1 hour |

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

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|---|----------------------------|
| 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 |
| Safe working in confined spaces | see information sheet 1433 |
| Directives for ventilation practice | see information sheet 1434 |
| Cleaning of steel and removal of rust | see information sheet 1490 |

SIGMAGUARD 790

April 2009

LIMITATION OF LIABILITY

The information in this data sheet is based upon laboratory tests we believe to be accurate and is intended for guidance only. All recommendations or suggestions relating to the use of the Sigma Coatings products made by PPG Protective & Marine Coatings, whether in technical documentation, or in response to a specific enquiry, or otherwise, are based on data which to the best of our knowledge are reliable. The products and information are designed for users having the requisite knowledge and industrial skills and it is the end-user's responsibility to determine the suitability of the product for its intended use.

PPG Protective & Marine Coatings has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. PPG Protective & Marine Coatings does therefore not accept any liability arising from loss, injury or damage resulting from such use or the contents of this data sheet (unless there are written agreements stating otherwise).

The data contained herein are liable to modification as a result of practical experience and continuous product development.

This data sheet replaces and annuls all previous issues and it is therefore the user's responsibility to ensure that this sheet is current prior to using the product.

The English text of this document shall prevail over any translation thereof.

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| | PDS | 7448 |
| 179526 | green | 4000002200 |
| 179528 | black | 8000002200 |