



SIGMATHERM 230

3 pages

October 2009
Revision of February 2008

DESCRIPTION	two component high build heat resistant phenolic epoxy coating
PRINCIPAL CHARACTERISTICS	<ul style="list-style-type: none"> - suitable as heat resistant system under insulation up to 230°C - good anticorrosive properties - good application properties, resulting in a smooth layer - no post curing is required to obtain mechanical strength
COLOURS AND GLOSS	pink, grey - eggshell
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	1.7 g/cm ³
Volume solids	68 ± 2%
VOC (supplied)	max. 195 g/kg (Directive 1999/13/EC, SED) max. 329 g/l (approx. 2.7 lb/gal)
Recommended dry film thickness	150 µm *
Theoretical spreading rate	4.5 m ² /l for 150 µm *
Touch dry after	2 - 3 hours at 20°C, 14 - 16 hours at 5°C
Overcoating interval	min. 8 hours * max. 14 days *
Full cure after	see curing table *
	(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"> - steel; blast cleaned to ISO-Sa2½, blasting profile 40 - 70 µm - the substrate must be perfectly dry before and during application of SigmaTherm 230 - substrate temperature must be above 5°C and at least 3°C above dew point during application and curing
INSTRUCTIONS FOR USE	mixing ratio by volume: base to hardener 87 : 13
	<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	allow induction time before use 5°C - 20 min. 10°C - 15 min. 15°C - 10 min.
Pot life	2 hours at 20°C * * see additional data

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AIRLESS SPRAY

Recommended thinner Thinner 91-92
 Volume of thinner 5 - 10%, depending on required thickness and application conditions
 Nozzle orifice approx. 0.46 - 0.53 mm (= 0.018 - 0.021 in)
 Nozzle pressure 15 MPa (= approx. 150 bar; 2130 p.s.i.)

AIR SPRAY

Recommended thinner Thinner 91-92
 Volume of thinner 5 - 10%, depending on required thickness and application conditions
 Nozzle orifice 2 mm
 Nozzle pressure 0.3 MPa (= approx. 3 bar; 43 p.s.i.)

BRUSH/ROLLER

only for spot repair and stripe coating
 Recommended thinner 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

Overcoating table for SigmaTherm 230 for dft up to 150 µm

with itself

substrate temperature	5°C	10°C	15°C	20°C	30°C
minimum interval	24 hours	20 hours	14 hours	8 hours	6 hours
maximum interval	28 days	25 days	21 days	14 days	7 days

– surface should be dry and free from any contamination

Curing table for dft up to 150 µm

substrate temperature	full cure
5°C	7 days
10°C	5 days
15°C	4 days
20°C	3 days
30°C	2 days

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Pot life (at application viscosity)

5°C	8 hours
10°C	6 hours
15°C	4 hours
20°C	2 hours
30°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

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

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.

	PDS	7445
273020	pink	6007001400
273021	pink	6007002200
273022	grey	5000001400
273023	grey	5000002200