

Sigma Coltura EP Coating

a four page issue

28 July 2009
revision of 10 May 2004

DESCRIPTION

two component, solvent free, high build epoxy floor coat

PRINCIPAL CHARACTERISTICS

- intermediate or final coat for Sigma Coltura floorcoat systems
- suitable for medium exposed floors (indoors and outdoors), such as gallery-, storeroom- and showroom floors
- suitable for asphalt beton floors
- good abrasion resistance
- low dirt adhesion
- easy cleaning
- anti-skid properties can be achieved in several ways
- good chemical resistance (see Sigma Coltura resistance list)

COLOURS AND GLOSS

from stock	RAL 7001, RAL 7032
made to order	RAL 1001, RAL 3009, RAL 5024, RAL 6011 RAL 7023

Note: Because slight colour deviation may occur between batches, material with different batch numbers should not be used on one floor area, if Sigma Coltura EP Coating is applied as final coat.

gloss

BASIC DATA AT 20°C

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

Mass density	approx. 1.26 g/cm ³
Solids content	approx. 97% by volume
VOC (supplied)	max. 0.9 lb/gal - 27 g/l

Recommended dry film thickness	350 µm
Theoretical spreading rate	2.8 m ² /l (2.2 m ² /kg) for 350 µm, depending on the roughness of the substrate

resistant to tread	18 hours*
Overcoating interval	min. 18 hours * max. 7 days*
Full cure after	7 days*

Shelf life (cool and dry place)	(data for components) 12 months
Flash point	base and hardener: n.a.

* see additional data

Sigma Coltura EP Coating

28 July 2009

**RECOMMENDED
SUBSTRATE CONDITIONS
AND TEMPERATURES**

- previous coating (Sigma Coltura EP Impregnating Primer), sound, dry and free from any contamination
- substrate and ambient temperature should be between 10° and 30°C during application and curing
- relative humidity should not exceed 85%
- substrate temperature should be at least 5°C above the dew point

INSTRUCTIONS FOR USE

mixing ratio by weight: base to hardener 66.3 : 33.7
 mixing ratio by volume: base to hardener 58.2 : 41.8

- Material temperature should be between 10°C and 30°C
- thoroughly mix base and hardener with a mechanical mixer for 2 minutes.
- the speed of the mixer should not exceed 800 rpm to avoid air entrapment
- fill the mixture into another can and stir for 1 minute until it is homogeneous

Induction time none

Pot life at 20°C 30 minutes

APPLICATION

Tools roller, trowel
 Recommended thinner no thinner to be added

Application by Trowel

For application pour the mixture on the suitably prepared subfloor and spread it evenly by trowel followed by rolling with a rough textured, hard cored roller

Application on sloping areas

For application of Sigma Coltura EP Coating on sloping areas, Sigma Coltura Thixmiddel can be added (max. 5 % by volume) after mixing of base and hardener.

CLEANING SOLVENT

Sigma thinner 90-53

SAFETY PRECAUTIONS

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

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

Sigma Coltura EP Coating

28 July 2009

ADDITIONAL DATA

Overcoating table for

substrate temperature	10°C	15°C	20°C	25°C
Sigma Coltura EP Coating minimum interval	32 hours	26 hours	18 hours	14 hours
maximum interval	7 days	7 days	7 days	7 days
Sigma Coltura PUR Finish 1K SF Blank minimum interval	48 hours	36 hours	24 hours	24 hours
maximum interval	5 days	5 days	5 days	5 days

surface should be dry and free from any contamination

for intervals exceeding the maximum overcoating interval, the surface has to be roughened sufficiently before overcoating

Curing table

substrate temperature	tack free	resistant to tread	full cure
10°C	24 hours	32 hours	12 days
15°C	16 hours	26 hours	9 days
20°C	12 hours	18 hours	7 days
25°C	8 hours	14 hours	5 days

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

Note

allow a minimum of 48 hours for curing before overcoat Sigma Coltura EP Coating with solvent based products.

Pot life

10°C	60 minutes
15°C	45 minutes
20°C	30 minutes
25°C	20 minutes

Sigma Coltura EP Coating

28 July 2009

PHYSICAL DATA OF CURED MATERIAL

Tensile Strength (DIN 53504 S2)	45 MPa
Elongation at break (DIN 53455)	35 %
E-modulus (DIN 53457)	150 MPa
Tear strength (DIN 53515)	35 N/mm
Abrasion resistance (ASTM D4060)	85 mg / 1000 cycles (CS17; 1kg)
Hardness (DIN 53505)	ca. 40 Shore D

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

Safety indications

Safety in confined spaces and health safety, explosion hazard - toxic hazard

Safe working in confined spaces

Directives for ventilation practice

Floor coating systems for medium interior exposure

Floor coating systems for medium exterior exposure

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.

PDS

8311