

CE

Products and techniques for construction and chemical industry

# PC<sup>®</sup> 5283/NV

# 1. Description

**The PC® 5283/NV** is a solventfree 2-component epoxy coating system with a very good chemical resistance and color retention.

# 2. Applications

 The PC<sup>®</sup> 5283/NV as an epoxy coating used for the protection of the support (concrete, repair of concrete with PC<sup>®</sup> 5187,...).



- The PC<sup>®</sup> 5283/NV as an epoxy paint for the protection of steel structures.
- The **PC<sup>®</sup> 5283/NV** as a colorfast topcoat on an epoxy floor system.

There is also an anti-slip variety of  $PC^{\$}$  5283/NV, namely  $PC^{\$}$  5283/SR. This is a durable 2-component structural paint with good chemical resistance and colour retention (see  $PC^{\$}$  5283/SR technical file).

# 3. Properties

- Good chemical resistance
- Good colour retention
- Good mechanical properties

# 4. Technical Data

• A-component (resin)

Colour: available in any color Viscosity (20°C): 11340 mPas Density: 1.40 kg/dm3

• B-component (hardener)

Colour: available in any color Viscosity (20°C): 1265 mPas Density: 1.03 kg/dm3

- Density of mixture: ± 1.26 kg/dm3
- Evaluation of the reactivity at 20°C: time needed for a mixture of 900 g PC<sup>®</sup> 5283/NV A and 345 g PC<sup>®</sup> 5283/NV B to rise in temperature from 20°C to 40°C: ± 30 minutes
- Pot life (20°): ± 45 minutes
- Mixture ratio (weight): 3 kg A / 1.18 kg B
  - Consumption:  $\pm$  300 500 g/m<sup>2</sup>, depending on the surface
- Pressure resistance (EN 13892-2):

After 24 h at 20°C: 48 N/mm<sup>2</sup>

After 7 d at 20°C: 70 N/mm<sup>2</sup>

Bend resistance (EN ISO 178, after 7 d at 20°C): 63.3 N/mm<sup>2</sup>

Date: 08/10/10

PC 5283 NV TD.DOC

Page 1 of 4

This information is given to our best knowledge. It is offered as a possible helpful suggestion in experimentation you may care to make along these lines. It is subject to revision as additional knowledge and experimentation are gained. We make no guarantee of results and assume no obligation or liability whatsoever in connection with this information

Terbekehofdreef 50-52 B-2610 Wilrijk

phone +32 3 828.94.95 fax +32 3 830.27.69

info@tradecc.be www.tradecc.be

# ECHNICAL DATASHEET



# Products and techniques for construction and chemical industry

- Abrasion resistance BCA(EN 13892-4): maximum penetration depth is 20 µm
- Impact resistance (EN ISO 6272-2): 2.06 Nm
- Cross-cut adhesion tester (EN ISO 2409): perfect adhesion, GT0 classification
- Hardness Shore D (24 h, 20°C): 71 Shore D (7 d, 20°C): 82
- Bond strength (EN 1542): 3.4 N/mm<sup>2</sup> (concrete fracture) with the use of PC<sup>®</sup> 5001/T as primer.
- Hardening time: The time to wait for placing e.g. an aliphatic polyurethane top coating PC<sup>®</sup> 6283 TOP 2K Mat type on PC<sup>®</sup> 5283/NV is at least 24 hours at 20°C. The time stated is reduced at higher and increased at lower temperatures.
- Application temp.: minimum 10°C, maximum 30°C (both ambient and underground)
- Shelf life: 12 months after the production date in the original, unopened and undamaged packaging, stored in a dry place between 10°C and 30°C.
- Load-bearing: at 20°C after 3 days fully mechanically load-bearing/ at 30°C after 2days / at 10°C after 7 days.

# 5. Chemical resistance

The samples were immersed in the chemicals for 8 days at 20°C.

Product	Result
Benzene	ОК
Dichloormethane	Not OK
Tetrahydrofurane	Not OK
Diethylether	ОК
Sulpheric acid 20%	ОК
Sulpheric acid 40%	Sp. contact OK
Sulpheric acid 98%	Not OK
NMP	Not OK
Toluene	ОК
Nitric acid 20%	ОК
Nitric acid 40%	Sp. contact OK
Nitric acid 68%	Not OK
Acetone	Sp. contact OK
Methanol	ОК
Hydrochloric acid 37%	ОК
Phosphoric 40%	ОК
Phosphoric 85%	Sp. contact OK
Ethanol	ОК
Acetic acid	Not OK
Formic acid	Not OK
Ethylbenzene	OK
NaOH 50%	ОК
Xylene	ОК
Dieseloil	ОК
BZA	ОК
Synthetic oil	OK
Pine oil	ОК
Jeffsol EC 50	ОК
Propylene carbonate	ОК
Gasoline	OK
Ethylene Glycol	OK
Satured solution of ammonium nitrat	OK

• Sporadic contact means that spilled product must be cleaned

Date: 08/10/10

PC 5283 NV TD.DOC

Page 2 of 4

This information is given to our best knowledge. It is offered as a possible helpful suggestion in experimentation you may care to make along these lines. It is subject to revision as additional knowledge and experimentation are gained. We make no guarantee of results and assume no obligation or liability whatsoever in connection with this information



# Products and techniques for construction and chemical industry

- within 4 hours with plenty of water.
- OK means that the integrity and physical characteristics
- remain the same. However a discoloration of the surface
- can appear under the influence of the chemicals.

### 6. Processing

- 6.1. PC<sup>®</sup> 5283/NV as an epoxy coating on concrete
- First apply the Primer PC<sup>®</sup> 5001/T and let it cure.
- Mix intensely both components of the **PC<sup>®</sup> 5283/NV**.
- Apply the mixture with a roller or brush.
- Wait at least 24 hours at 20C° between the application of the different layers.
- No vapour pressure may occur: the application of an epoxy floor system is only durable when the support is protected from vapour pressure by means of a suitable sealing foil. (Polyethylene or equal).

# 6.2. The PC<sup>®</sup> 5283/NV as an epoxy paint on steel structures

- Sandblast the steel structure according to Class SAE 2,5.
- First apply the Primer PC<sup>®</sup> 5001/T and let it cure.
- Apply directly the **PC<sup>®</sup> 5283/NV** on a dry and clean surface.
- Coverage: two layers of 250 g/m<sup>2</sup>, curing time between the layers: 24 hours at 20 C°.

# 6.3. The PC<sup>®</sup> 5283/NV as a colorfast topcoat

- Mix intensely both components of the PC<sup>®</sup> 5283/NV.
- Apply the mixture directly on the epoxy floor type PC<sup>®</sup> 5283 SL/TES with a roller or brush.
- At 20C° wait at least 24 hours before the application of the different layers.

# 7. Packing

Component A	3,0 kg.
Component B	1,15 kg.
Standard packing:	4,15 kg.

# 8. Cleaning

The product if not cured, can be removed with PC<sup>®</sup> 5900

### 9. Precautions and safety requirements

- Avoid contact with the skin and the eyes
- Wear safety glasses, gloves and an overall
- For more information: see Material Safety Data Sheet
- Make sure that the products do not come in contact with water or damp

Date: 08/10/10

PC 5283 NV TD.DOC

Page 3 of 4

This information is given to our best knowledge. It is offered as a possible helpful suggestion in experimentation you may care to make along these lines. It is subject to revision as additional knowledge and experimentation are gained. We make no guarantee of results and assume no obligation or liability whatsoever in connection with this information



Products and techniques for construction and chemical industry

ECC N.V. Terbekehofdreef 50 – 52 B-2610 Wilrijk		
08		
	0-F6-AR0.2-B3.4-IR2-GT0	
ompressive strength	n floor screed material	
exural strength	F6	
ear resistance BCA	AR0.2	
ond strength	B3.4	
pact resistance	IR2	
hesion by cross-cut test	GT0	
action to Fire	Euroclass F	
lease of corrosive ostances	SR	

Date: 08/10/10

PC 5283 NV TD.DOC

Page 4 of 4

This information is given to our best knowledge. It is offered as a possible helpful suggestion in experimentation you may care to make along these lines. It is subject to revision as additional knowledge and experimentation are gained. We make no guarantee of results and assume no obligation or liability whatsoever in connection with this information