



## PC<sup>®</sup> 4840 PUREA

### 1. Description

The **PC<sup>®</sup> 4840 PUREA** is a 2-component polyurea spraycoating. It is a solvent-free spray coating with a fast curing time.

### 2. Applications

The **PC<sup>®</sup> 4840 PUREA** coating system is a sprayed waterproof protection layer in following cases: interiors of swimming pools, protection of tubes, coatings for (repair) soil pipes, drainpipes, drainage canals, tank farms, industrial floorings, roof coverings, parking lots, conveyers, pavements, retention pounds, bridges, ...

### 3. Properties

Polyurea coatings combine a high flexibility with a high hardness. The **PC<sup>®</sup> PUREA** coating system is the best solution when the protection layer must respond to following requirements:

- Fast curing
- Application possible at high moisture and/or low temperatures
- Extreme abrasion resistance
- Impermeable membranes
- High layer thickness possible
- High chemical resistance

Furthermore it's a seamless coating system.

### 4. Technical Properties

- |                        |                                                    |
|------------------------|----------------------------------------------------|
| • Colour:              | grey or black                                      |
| • Jelly time:          | 3 sec., stick-free after 5 sec.                    |
| • Curing time:         | 2 hours (pedestrians), 12 hours for normal traffic |
| • Tensile strength:    | 21 N/mm <sup>2</sup> (ISO 527-3)                   |
| • Elongation at break: | 295 % (ISO 527-3)                                  |
| • E-modulus:           | 131 N/mm <sup>2</sup>                              |
| • Shore D:             | 50 (ISO 868)                                       |

A review of all the performance tests executed within the framework of the ATG certification can be obtained on demand.

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## 5. Chemical resistance

The samples were immersed in the chemicals for 15 days at 20°C.

Product	Result
Benzene	Sp. contact OK
Dichloormethane	OK
Tetrahydrofurane	Not OK
Diethylether	OK
Sulpheric acid 5%	OK
Sulpheric acid 10%	Sp. contact OK
Sulpheric acid 98%	Not OK
NMP	Not OK
Toluene	Sp. contact OK
Nitric acid 20%	OK
Nitric acid 40%	Sp. contact OK
Nitric acid 68%	Not OK
Acetone	Not OK
Methanol	OK
Hydrochloric acid 37%	Sp. contact OK
Phosphoric 85%	OK
Ethanol	Sp. contact OK
Acetic acid 5%	Ok
Acetic acid	Not OK
Formic acid	Not OK
Ethylbenzene	Not OK
NaOH 25%	OK
Xylene	OK
Dieseloil	OK
BZA	Not OK
Synthetic oil	OK
Pine oil	OK
Jeffsol EC 50	OK
Propylene carbonate	OK
Gasoline	OK
Saturated solution of ammonium nitrat	OK

- Sporadic contact means that spilled product must be cleaned 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

- The concrete has to be dry (moisture content < 3%), clean and strong enough and has to be at least 1 month old. The surface has to dispose of a sufficient compression strength of min. 25 N/mm<sup>2</sup> with a min. tensile strength of 1,5 N/mm<sup>2</sup>.
- Any dirt, cement ore loose parts have to be removed by blasting or another suitable method and the surface has to be dust free.
- Apply a suitable primer (for more info, please contact the technical responsible person of TRADECC).
- Apply **PC® 4840 PUREA** in 2 crosswise sprayed layers with a two component high pressure machine, type GUSMER, which allows the heating of separated components of **PC® 4840 PUREA**. **PC® 4840 PUREA** can be applied on the hardened primer PC® 5001/T or on the scratch coat PC® 5284 FILLER.
- You can't get rid of possible dilatation joints on the surface. They have to maintain their function.

- To put a Polyurea membrane is only long-lasting if the surface is free of vapor pressure by placement of a suitable sealing foil (polyethylene or equal).
- Never adapt **PC® 4840 PUREA** by negative H<sub>2</sub>O pressure.

### 7. Consumption and shelf life

- Consumption: 1,1 – 1,3 kg/m<sup>2</sup> for 1 mm thickness
- Cross-spray according to ATG: 2 layers of 1,5 till 2,5 mm thickness
- Shelf life: 24 months after production date in the original, unopened packaging. Keep at a moisture-free room, between +5°C and +30°C. They should be kept away from any direct flame or heat source protected from direct sunlight.

### 8. Cleaning

Uncured product can be removed with acetone.

### 9. Precautions and safety requirements

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