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Technical Data Sheet Humidur® WF22 TC

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WF 22

1. Product Description

Humidur WF22 TC is a two-component, solvent-free, epoxy silane hybrid topcoat offering the following benefits:

- Excellent gloss and colour retention
- UV-resistant
- Environmentally friendly (100% solids, no solvents, no VOC's, no heavy metals, no iso-cyanates)
- High weather resistance
- Excellent impact resistance
- Outstanding adhesion to substrate

2. Composition

Humidur WF22 TC consists of two components:

A is the base component and contains:

- The epoxy siloxane resin
- Lamellar abrasion and impact resistant fillers
- Colouring pigments

B is the hardener and contains:

- Amino-silane hardener complex

3. Recommended Use

Humidur WF22 TC is generally applied on top of epoxy coatings and on top of concrete for aesthetic reasons, for its high weather and UV resistance. Apply Humidur WF22 TC on top of Humidur WF22 FP and QR when a durable high grade and colour stable finish is required.

Opposed to the other Humidur coatings, Humidur WF22 TC cannot cure under water.

The application of Humidur WF22 TC can be done by using airless spray, gravity feed spray gun, brush or roller.

4. Manufacturer's Information

Acotec NV, with registered offices at Aalst, Belgium, is the developer and sole manufacturer of the Humidur products, distributed worldwide through a wide network of agents and cooperative companies. The proven lifetime of the Humidur coatings in practice is more than 30 years.

Contact Acotec directly or visit www.humidur.com for reference projects.

5. Product Data

SPECIFIC DATA		**HUMIDUR WF22 TC**
Density @ 23 °C	Component A Component B Mixture A + B	± 1.27 g/cm³ ± 0.985 g/cm³ ± 1.23 g/cm³
Solid content		100 %
Viscosity of the mixture at 23 °C and CSS 750 Pa		3 ± 1 Pa·s
Flash point mixture A + B		> 90 °C
Hardness		Shore D > 80
Colour (gloss)		Any RAL colour 25 colours immediately deliverable
Practical thickness in one layer		60 µm
Minimum recommended thickness		100 µm
Covering capacity (WFT = DFT)	Theoretical @ 60 µm Theoretical @ 100 µm	0.074 kg/m² 0.123 kg/m²
Mixing ratio A : B	By weight By volume	7.6 : 1 5.9 : 1
Overcoating time		4 – 48 hours
Standard packaging / set		4 kg or 16 kg
Pot life @ 23 °C		2 hours
Shelf life max. 25 °C dry		18 months

6. Curing time

The curing times depend on air circulation, temperature and the film thickness. The touch dry time at 23 °C is 4 hours and full cure is achieved after 3 days at this temperature. These values are indicative.

Opposed to the other Humidur coatings, Humidur WF22 TC does not have the ability to cure under water.

	10 °C	**15 °C**	**20 °C**	**25 °C**	**30 °C**
Touch-dry	6 hours	5 hours	4 hours	3,5 hours	3 hours
Full cure	5 days	4 days	3 days	48 hours	36 hours

7. Surface preparation

All surfaces shall be free of oil, grease, dust or any other contamination prior to coating.

SUBSTRATE	**CLEANLINESS**	**ROUGHNESS**
Coating	Remove all grease, dirt, any other contamination, and moisture	Orbital electric sander or abrasive paper 120 –180 grade
Concrete	Remove all grease, dirt, any other contamination, and moisture	Orbital electric sander or abrasive paper 60-120 grade Sweep blasting

8. Application

APPLICATION PARAMETERS	**HUMIDUR WF22 TC**
Temperature before mixing	20 °C – 25 °C
Application temperature of mixture	25 °C ± 5 °C
Surface temperature* minimum **Surface temperature* maximum ([1])**	> 5 °C and > DPT + 3 °C 50 °C ([1])
Humidity* Relative Humidity **Humidity* Surface**	< 95 % No condensation
Spray nozzle opening **Spray nozzle angle**	0.009 ″ – 0.019 ″ 30 ° – 50 °

* These criteria are valid to achieve the most durable protection. If a reduced coating lifetime is desired, application can continue outside this window. The existing warranties do not apply in these conditions. Please contact Acotec NV directly for more information on the expected lifetime in these conditions.

[1] At elevated temperatures it might be difficult to achieve the demanded layer thickness in one layer, in that case a second layer will be needed.

9. Environment

Humidur WF22 TC has been designed to fully respect the environment.

The product contains:

- No VOC (0 %) (100 % solids)
- No solvents or diluents (WFT = DFT)
- No isocyanates
- No heavy metals

10. Important note

The English version of the Technical Data Sheet takes precedence over other languages. The latest version of the Technical Data Sheet can be found on our website www.humidur.com.

Should there be any discrepancies between this document and the document online, the online document takes precedence.