

Technical Data Sheet

701 AquaGuard “Epoxy Coating”

Version 01/2025

UNIGRIP
DANTECH ELITE COMPOSITES

UNIGRIP 701 AquaGuard - Epoxy Coating

Characteristics:

- Solvent-Free – 100% solids formulation with no shrinkage.
- Non-Conductive – Provides reliable electrical insulation.
- Conveniently available in single and dual cartridges for ease of use (pre-mixed)
- Rapid Curing – Fast hardening for emergency repairs and reduced downtime.
- High Mechanical Strength – Excellent compressive and structural performance.
- Strong Adhesion – Bonds effectively to metals and epoxy-compatible composites.
- Temperature Resistant – Maintains performance under elevated temperatures.
- High Durability – Resistant to corrosion, chemical attack, abrasion, and erosion.
- Specially engineered - for application in dry, wet and submerged environments.

Application methods

- Spray – Airless or conventional K2 spray equipment recommended for large surface areas.
- Brush – Suitable for stripe coating, edges, welds, and small repairs.
- Roller – For small to medium surfaces and touch-up work; may require multiple coats for full coverage. (We recommend double layer applications- 2 x 7.8 mils / 2 x 200 microns)

Technical properties

- Density Mixed product: • Approx. 1,35 kg/dm³ at 20°C (DIN 53217)
- Solid content: • 100 volume percent (= 100 weight percent)
- Mixing Ratio: • Component A: 70.00 parts by weight
• Component B: 30.00 parts by weight
- Potlife: • Approx. 45 minutes of 1 kg of mixed product at 20°C.
- Recommended layer thickness • 13.8 mils / 350µm wet/dry
- Theoretical spreading rate: • 22.6 sqf / 2,1 m²/kg (= 30.13 sqf / 2,8m²/ltr) at 13.8 mils / 350µm wet/dry layer thickness
- Practical spreading rate: • Approx. 1.03 lbs (470g/m²) at 13.8 mils / 350µm layer thickness
(Depending on the conditions of the substrate and method of application, etc.)

Drying time (20°C / 65% R.H.)

- Wet in Wet applications • After approx. 60-90 min (Allow approx.30 minutes between layers before applying the next layer)
- Dust-free: • After approx. 4 hours
- Re-Coatable³⁾: • After approx. 60-90 min
- Light traffic: • After approx. 7 hours
- 1) Two-layer Epoxy we recommend Wet in Wet applications
 - 2) PU Topcoats-Ensure the epoxy primer is fully cured according to the manufacturer's specified curing time
 - 3) In systems a maximal drying time of 24 hours between the layers; unless a pre-treatment of the substrate takes place.

Shear adhesion on steel • ≤TBA (N/mm²)

Dyna pull on steel N/mm² • ≤6.6 (N/mm²)

Dyna pull aluminum N/mm² • ≤7.1 (N/mm²)

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	SO (mm ²)	E (N/mm ²)	F Crack (N)	R Crack (N/mm ²)	F Max (N)	R Max (N)	Compression
Compressive strength	159.30	548.2	8.488.5	51.4	8.488.5	51.4	4.03
Tensile strength	45.77	1.933.2	1.081.9	21.4	1.081.9	21.4	2.15

Heat Resistance	Dielectric strength Kv/mm	Shore D @ 20 °C / 24 hrs	Peak exotherm	Shear adhesion R Crack (N/mm ²)	Average wear above water
248°F (120°C)	10	≥60	47°C after 57min.	TBA	146.2

Pendulum hardness development according to König										
Time (Hrs)	16	24	48	96	168	196	216	240	264	336
Above water	29	43	76	93	95	103	104	112	107	102
Under water	6	7	10	13	17	21	26	25	27	28

Tested Acc. To:

Hardness: ISO 1522
 Tensile strength: ISO 4624
 Compressive strength: ISO 527
 Adhesion to steel: ISO 4624
 Density mixed products: DIN 53217
 Taber test - average wear index: ISO 7784-2
 Flash point component: DIN 53213

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Works on substrates (but not limited) to such as:

- Steel, metal, GRE, Fiberglass and other composite materials Concrete and other stony substrates, and wood.

Substrate conditions:

- Above water: The substrate must be clean, grease-free & dust-free and comply with the standard applicable conditions and requirements.
- Underwater: The substrate must be clean, grease-free and comply with the standard applicable conditions and requirements

Remark:

- Remark: Treatment and the system of choice must be tailored to the technical capabilities and requirements of the application. For an optimum result a thorough inspection and a technical advice may be required

Availability:

- Colour: Red (#B31942, #BFOA30, and #B22234)
- Appearance: Glossy
- Packaging: 9oz (265ml) single cartridge and 38oz (1125ml) dual cartridge, 1.05 gal kit (4 ltr) and 4.23 gal kit (16 ltr)

Shelf life and storage:

- Store in well closed original packaging, cool, dry & frost free
- Shelf life At least 24 months in the original packaging.

Flash point:

- Component A: >65°C (DIN 53213)
- Component B: >65°C (DIN 53213)

Processing:

- Reducing/thinning is not recommended

Mixing instructions:

- Single and dual cartridge: We recommend to Stir gently after dispensing through the static mixing nozzle, prior to application.
- 4 ltr and 16 ltr kits: Add Component B to Component A. Mix thoroughly and mechanically until a uniform blend is achieved. Transfer the mixture into a clean container and mix again to ensure full homogeneity, avoiding weak spots or incomplete curing caused by insufficient mixing. Note: “Pot life is significantly reduced when mixing larger quantities”.

Precautions:

- Ensure sufficient ventilation during application and curing.
- Avoid skin contact by using the appropriate protection like gloves, safety glasses, safety shoes, safety clothing, protective creams, etc.
- Do not apply with open fire. No smoking. See also the instructions on the label of the product

Safety Measures:

The national legislation for health & safety, environment will apply for the user. Please consult the latest version of the Material Safety Data Sheet of this product.

This product information might be subject of change due to inevitable product modifications. Please consult our Technical service department for the most recent version of the Technical data sheet. Previous versions of this Technical data sheet are no longer valid.