TENAXON T 247-2 KTW 6E247-2

Series 6E247 · Solvent-free 2K epoxy internal lining for drinking-water tanks (KTW-BWGL)

01 PRODUCT DESCRIPTION

TENAXON T 247-2 KTW 6E247-2 is a solvent-free, pigmented two-component liquid plastic for the internal lining of drinking-water tanks made of steel and cement concrete. The system is designed for durable corrosion protection and the hygienically safe lining of drinking-water installations and is approved to KTW-BWGL; it meets the applicable requirements for contact with drinking water. The coating can be applied directly onto the substrate without a primer (direct-to-metal) and is suitable for airless spray application. It forms a dense, pore-free and well-adhering layer and enables economical and reliable execution of new-coating and refurbishment work.

02 PRODUCT PROPERTIES

Binder system	Epoxy resin
Hardener system	Tenaxon T 247-2 KTW Hardener 7E247-2
Cleaning thinner	EP Thinner 5E403
Characteristics	Solvent-free · Direct-to-metal · Repairable & recoatable · Sprayable
Color shade	Light grey (further color shades on request)
Gloss	Glossy
Shelf life	18 months in the unopened original container at +4 °C to +40 °C. Protect from frost and moisture.
Mechanical resistance	Shore D 70
Chemical resistance	Water, mineral water, brine and seawater as well as wastewater, dilute organic and inorganic acids, alkaline solutions, alkalis and detergents
Thermal resistance	Up to approx. +80 °C (dry heat), briefly approx. +120 °C | up to approx. +40 °C (moist heat and water)
Electrical resistance	> 10^8 Ω·m²
Container size comp. A	10.0 kg
Container size comp. B	2.0 kg
Approvals and specifications	Tested to KTW-BWGL, Annex B of the German Environment Agency, and to DIN EN 16421, method 2

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Property	Comp. A	Comp. B	Mixture
Density · DIN EN ISO 2811-1 · +20 °C *1	Approx. 1.69 g/cm³	Approx. 0.99 g/cm³	Approx. 1.50 g/cm³
VOC content · IE Directive 2010/75/EU *1	Approx. 0 g/l	Approx. 0 g/l	Approx. 0 g/l
Solid content (wt.-%) · SDS *1	Approx. 100 %	Approx. 100 %	Approx. 100 %
Viscosity · DIN EN ISO 2555 · +20 °C *1	Approx. 16,500 mPas	Approx. 850 mPas	Approx. 5,000 mPas

*1 *Depending on color shade*

03 APPLICATION

The following information may vary depending on the application. Please contact your direct contact person for more detailed information.

Substrate	Steel, zinc/aluminium, cement concrete/screed (further substrates on request)
Surface preparation	Ensure sufficient load-bearing capacity before application. **Steel:** Surface preparation to EN ISO 12944-4. Free of weld spatter, pores, laps, burrs, grease, oils and dirt. Blast-clean to Sa 2½, mean roughness Rz approx. 50–70 µm (G or operating mix GS). **Optional** primer: 1 × 30 µm Tenaxon T 569 (3E569), approx. 100 g/m² at 30 µm DFT. **Zinc/aluminium:** Degrease, mechanically roughen or sweep-blast. Primer: 1 × 30 µm Tenaxon T 569 (3E569), approx. 100 g/m² at 30 µm DFT. **Cement concrete/screed:** Surfaces solid, clean, free of grease, oil, wax, sand, dust and release agents, textured, load-bearing, free of loose/sanding particles and standing water. **Optional** primer: Steopox 220 (2E220), approx. 300–500 g/m² depending on absorbency; if required broadcast with fire-dried quartz sand 0.1–0.3 mm.
Mixing ratio	100 : 20 by weight
Mixing	Stir both components separately and homogenise if necessary. Pour component B into the container of component A and mix with an electric stirrer for at least 3 min at max. 700 rpm. Transfer into a clean container and mix again thoroughly for approx. 1 min.
Theoretical consumption	150 g/m² per 100 µm WFT | 150 g/m² per 100 µm DFT
Film thickness	Max. 700 µm DFT | max. 700 µm WFT per coat
Application method	Brush · Roller · Trowel · Airless spray
Application conditions	**Air temperature** +10 °C to +30 °C **Relative humidity** max. 80 % **Dew point** min. 3 °C below surface temperature For airless spraying: material and equipment temperature +20 °C to +25 °C.
Pot life*2	Approx. 30 min
Recoating interval (with itself)*2	Min. 12 h | max. 48 h. After the maximum recoating time has elapsed, mechanical surface preparation (e.g. sanding or sweep-blasting) is required.

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DRYING[*2]

Dust-dry (TG 1)	Approx. 3.5 h
Fully cured (mech. & chem.)	Approx. 7 days
Compatible systems	Primer steel and zinc/aluminium: Tenaxon T 569 (3E569) Primer cement concrete/screed: Steopox 220 (2E220) Further applications on request.

[*2] *Values are based on laboratory measurements at +20 °C. Lower temperatures slow down drying; higher temperatures accelerate it.*

Note on epoxy resin: During curing, epoxy resin is sensitive to moisture. Exposure to moisture may lead to the formation of a carbamate layer (white spots). This has a purely visual effect. Affected areas can be treated with a 10–20 % citric acid solution.

04 NOTE

This product data sheet supersedes all previously published product data sheets. The information contained herein is based on practical experience under standard conditions and assumes proper storage and processing. Substrates, materials and working conditions may vary. Therefore, no warranty or liability can be derived from the information contained in this document or from verbal consultation. It is the buyer's responsibility to verify the product's suitability for the intended use. Preliminary trials are recommended. The relevant legal regulations, the leaflets of the BG RCI and the accident prevention regulations of the responsible employers' liability insurance association must be observed. In all other respects, our General Terms and Conditions of Sale and Delivery apply.

MODIFIED BY
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APPROVED BY
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