

TENAXON T 597 A

Series 6E597 · Solvent-free, abrasion-resistant 2K epoxy liquid plastic for hydraulic steel structures and offshore



01 PRODUCT DESCRIPTION

TENAXON T 597 A is a solvent-free, tar-free and abrasion-resistant two-component epoxy liquid plastic for hydraulic steel structures, hydropower plants, harbour structures, offshore installations and comparable, heavily mechanically stressed objects in water. It can be spray-applied at high film build and forms a highly abrasion-resistant, durable protective layer.

02 PRODUCT PROPERTIES

Binder system	Epoxy resin			
Hardener system	Tenaxon Härter EP 20 7E570			
Cleaning thinner	Bergolin Thinner 5E403			
Characteristics	 Solvent-free	 Abrasion-resistant	 High-build	 Highly mechanically resistant
Color shade	RAL 9005 (further shades on request)			
Gloss	Glossy			
Shelf life	Approx. 12 months (comp. A) / approx. 6 months (comp. B) in the unopened original container at +4 °C to +40 °C. Protect from frost and moisture.			

Property	Comp. A	Comp. B	Mixture
Density · DIN EN ISO 2811-1 · +20 °C * ¹	Approx. 1.350 g/cm ³	Approx. 0.980 g/cm ³	Approx. 1.280 g/cm ³
VOC content · IE Directive 2010/75/EU * ¹	Approx. 60.0 g/l	Approx. 67.6 g/l	Approx. 61.0 g/l
Solid content (wt.-%) · SDS * ¹	Approx. 95.56 %	Approx. 63.05 %	Approx. 92.31 %
Viscosity · +20 °C * ¹	Thixotropic	Approx. 25 s (4 mm) · ISO 2431	Thixotropic

*¹ Depending on colour shade

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03 APPLICATION

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

Substrate	Steel (further substrates on request)
Surface preparation	Steel: Surface preparation to EN ISO 12944-4; free from weld spatter, pores, overlaps, burrs, grease, oil and dirt. Blast-clean to Sa 2½, mean roughness Rz approx. 50–70 µm. Primer: 1 × 30 µm Tenaxon T 569 (3E569), consumption approx. 100 g/m² at 30 µm dry film thickness.
Mixing ratio	9 : 1 by weight 6.66 : 1 by volume
Mixing	Stir both components separately and homogenise if necessary. Transfer 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 thoroughly again for approx. 1 min.
Theoretical consumption	Approx. 130 g/m² per 100 µm wet film thickness
Film thickness	Max. 2,000 µm dry film thickness max. 600 µm wet film thickness per coat
Application method	 Airless spraying  Brush
Application conditions	 Application temperature +5 °C to +30 °C air temperature; object temperature min. +10 °C  Relative humidity max. 85 %  Dew point Object temperature min. 3 °C above dew point
Pot life ^{*2}	Approx. 60 min
Recoating interval (with itself) ^{*2}	With itself: min. 12 h max. 48 h; if exceeded, the surface must be sweep-blasted
DRYING^{*2}	
Dust-dry	Approx. 10 h
Walkable / sandable	Approx. 30 h
Fully load-bearing (mech. & chem.)	Approx. 7 days
Compatible systems	Base coat: Tenaxon T 569 (3E569) Further applications on request.

^{*2} The data refer to an ambient temperature of +20 °C and a relative humidity of 65 %; deviating ambient conditions may extend or shorten the stated periods.

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**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

07.09.2026 – Martin Krull, Head of Laboratory

APPROVED BY

07.09.2026 – Stefan Eisenmenger, Product Management