GTF Freese
Marine Floorings

Product Data Sheet

TEFROKA®PU-1- L

Solvent-free 2-component polyurethane resin for interior and exterior decks used as flexible primary levelling on ships.

1. Field of Application

TEFROKA® PU-1-Lmeets the requirements of IMO FTP Code 2010; it is a solvent-free 2 component polyurethane resin, suitable for interior and exterior decks on ships. It is an easy to handle, self-levelling material with a wear- and water resistant surface. The material distinguishes by its light weight and high abrasion resistance. It can also be used for levelling of deck surfaces and waterproofing of cement-based systems e.g. in galleys, wet spaces.

2. Properties

• Solvent-free	• Abrasion resistant	• Flexible
• Water-impermeable	• Light-weight	• Chemical resistant
• Fillable e.g. light-weight-fillers	• Self-levelling	• Uncolored(whitish)

3. Technical Data

Mixing Ratio		100:30	
VOC-Content		17,23	g/l
Density	DIN EN ISO 1183 -1	ca. 0,9	g/cm³
Mix Viscosity		8000 ± 1500	mPa s
Solid Content		98,2	%
Shore - Hardness		D 45	
Fire rating	IMO FTP-Code 2010	Part 2 and Part 5	

4. Packing

1 Unit = 19,5 kg (Comp. A + B = 15,0 kg + 4,5 kg)
1 Unit = 9,1 kg (Comp. A + B = 7,0 kg + 2,1 kg)
On demand:
Poraver® 1-2 mm , 1 Bag = 12,5 kg (complies approx. 54 liters)
Fire-dried Quartz-sand 0,3 - 0,8, 1 Bag = 25 kg
TEFROKA® KH Filler , 1 Bag = 25 kg
Thickening agent: Sylothix 51

5. Substructure

Requirements

- The substructure needs to be solid, dry, clean and free from grease and oil.
- Temperature of substructure must be higher than + 5°C and 3°C higher than the dew point.
- The condition of the substructure always needs to be checked before application of TEFROKA®PU-1-L.

Substructures

a) Steel-decks

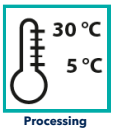
- Shop-primed interior or exterior decks must be grinded and primed with one coat TEFRO®prime EP 30.
- If no shop-primer has been applied, please contact us.
- Blasted outside areas are treated with two coats anticorrosive primer TEFRO®prime EP 30.

b) Aluminium decks and galvanized steel decks of interior and exterior areas
- These surfaces have to be clean, grinded and primed with TEFRO®prime EP 30.

c) Cement-based substructures
- Please contact us for any specific preparation of the substructure.
- To continue application, the substructure needs to have a residual moisture content of less than 2 M%.
- The substructure may be primed with TEFRO®floor EP and sprinkled with fire-dried quartz-sand.

d) EP-/PU-Surfaces
- Existing System-Coatings (if the application was finished less than 24 hours before) can be over-coated directly.
- In all other cases, existing System-Coatings need to be slightly grinded an if necessary primed.
- Remove grinding-dust.

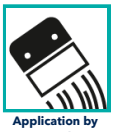
6. Application Information



Processing temperature

Temperature of Atmosphere	+10°C	+20°C	+30°C
Ready for foot traffic (h)	24	12	6
Ready to mechanical strain (d)	2	1	0,5
Ready to chemical strain (d)	4	2	1
Max. rel. humidity in (%)	80	80	80
Pot Life	approx. 45 minutes (+20°C)		
Consumption	approx. 0,9 kg/m²/mm		
Temperature of Object	min. 5 °C and max. 30 °C		
Product Temperature	min. 15 °C and max. 25 °C		

6.1 Instruction for Use


Application by spatula

Mixing
- Mix component A and B in the specified mixing ratio.
- Add component B to component A and mix (approx. 2-3 minutes) until a homogeneous mixture is achieved.
- Mixing to be done at slow speed (300-400 RPM).
- Stir up from the bottom and sides thoroughly, to assure that the hardener is equally spread.
- Re-pot the mixture and stir again.

Application
- Spread the homogeneous mixture.
- Use a tooth-edged trowel for application.
- After application immediately roll with a spiked roller.
- Thickness (Technical) 0,5 -10 mm.
- If applied in several layers, higher thicknesses are possible.
- The material can be filled with fire-dried quartz-sand or light weight fillers to install higher thickness.
- Irregularities to levelled in a seperate working step using unfilled or filled material depending on thickness of coat.
- Can be used as a mortar when filled with TEFROKA® KH filler, fire-dried quartz-sand or light weight filler.

- High temperatures shorten, low temperatures extend the processing time.
- The maximum time for accepting following layers without special preparations is 24 hours (+20°C).
- For intended changes of application, please contact us.

Equipment and Cleaning

- Suitable stirrer, trowel, tooth-edged trowel, spiked roller, tooth rake, looped roller.
- Clean tools right after use with EP-/PU-Thinner.

7. Product Range

TEFRO® prime EP 30, TEFRO®floor EP, TEFROKA® EP-/PU Sealer, TEFROKA® PU-L Sealer, TEFROKA® PU-Deco Sealer, TEFROKA® PU Sealer, TEFROKA® KH Filler, Light-weight filler PORAVER 1,0 -2,0 mm, fire-dried Quartz-sand WF 03 (01 -0,5 mm) und 0,3 - 0,8mm, PU-Speed, Sylothix 51

8. Shelf Life

12 months, in a cool, dry, frost-free place in unopened containers at 5 – 30 °C. In case of discrepancies please contact us!

9. Color

- Uncolored (whitish).

The color may vary between the batches, due to raw materials and the production process.

10. General Remarks

All mentioned figures and consumption values are results which were determined under laboratory conditions. When using the product on the job, deviating values may result. Lower temperatures delay; higher temperatures accelerate hardening and curing of the product. The specified minimum of the application temperatures have to be followed. No other materials may be added and the mixing ratios are not allowed to be changed.

11. Conformity

The product meets the criteria of IMO FTP-Code 2010, attachment 1, Part 2 und 5. MED Certification and type approvals of other classification societies are available. The conformity is in accordance with the effective regulations 2014/90/EU of 23-July-2014. For the wheel symbol the general principles of article 30, paragraph 1, 3 and 6 of the regulation (EG) no. 765/2008 apply.

12. Safety

Read the hazard notes and safety advices as stated in the safety data sheets.

13. General Note

This product data sheet is based on the latest state of art and our experience and it is giving recommendations based on our best knowledge. However, it is without legal binding and establishes neither a contractual legal relationship, nor a secondary obligation on any sales contract. This product data sheet does not release the buyer or user of the obligation, to check the substructure and the material for the intended purpose. If the buyer or user is going to use the material differently than described above, it needs to be discussed with manufacturer before the application. Without approval of altered use of material, usage is at the buyers or users on risk. This refers especially to combinations with other products. Only product data sheets of latest date are valid.