

Basis	Supple, temperature resistant laminating paste
Resin	PS 05
Hardener	TL-1
Colour	grey

Applications

- Vacuum forming tools
- PU-foaming tools
- Polyester press moulds
- Prepreg tools
- Adhesive probes

Properties

- low shrinkage
- soft
- heat resistant

Processing data

Product		Mixture PS 05/ TL-1	Resin PS 05	Hardener TL-1
Colour		grey	grey	Yellowish transparent
Mixing ratio	p. b. w.		100	13
Viscosity at 25°C	mPas	pasty	pasty	35 ± 10
Density at 20°C	g / cm ³	1,10 ± 0,05	1,10 ± 0,05	0,940 ± 0,02
Pot life 200 g / 20°C	min.	50 - 60	-	-
Curing time at RT	hrs.	16 - 24	-	-

Physical data

Properties	Inspect. requirem.	Unit	Value
Flexural strength	EN ISO 178	MPa	47 ± 5
Flexural elongation at break	EN ISO 178	%	1,0 ± 0,2
Flexural modulus	EN ISO 178	MPa	4985 ± 700
Impact resistance (Charpy)	EN ISO 179	kJ/m ²	4,6 ± 0,7
Compressive strength	EN ISO 604	MPa	75 ± 5
Heat resistance (HDT)	DIN EN ISO 75 B	°C	105 ± 5
Shore hardness	DIN ISO 7619-1	Shore D	80 ± 3
coefficient of thermal expansion	internal test / Dilatometer	10 ⁻⁶ K ⁻¹	ca. 32

Sales units (packages)

Units	Resin PS 05	20,000 kg
	hardener TL-1	0,975 kg / 5,000 kg' / 50,000 kg

Processing instructions

The mixing of the smooth resin paste with the liquid hardener should be executed in a mechanical mixer. Please note that always small quantities should be prepared (max. 10 kg) , so that an excellent mixing is possible. But **ebalta** PS 05/TL-1 can also be mixed with a star stirrer in a hand drill gun or small quantities by hand. A good mixing can be made out when a uniform colour shade is built from the blue hardener and the grey resin paste. The laminate system tends to build up high reaction temperatures at temperatures higher than 25°C. This develops tensions, which could lead to distortion of the tool.

In General

ebalta PS 05/TL-1 is a very smooth, glass fiber filled two-component-epoxy resin paste, which cures at room temperature with a thickness of 15 - 20 mm without considerable shrinkage and which is temperature resistant after a single post-curing of approx. 10 hours at 60-80°C to 90°C.

This laminate paste is a system, which consists of glass fiber and reinforcing material. Due to the coloured hardener the mixing of paste and hardener can be easily controlled.

The mixture can be applied without problems and shows a excellent strength after curing.

The mixed laminate paste has a low specific weight and is therefore very suitable for the lightweight construction of large-area reinforcements.

Storing

At appropriate storage 18-25°C.

Occuring crystallization due to disadvantageous storage conditions can be made return by warming up the material at approx. 60° C.

Opened containers should be closed immediately after use and be protected against moisture. This material should be used up as soon as possible.

Shelf life is indicated on the labels.

Safety measure

Please follow the precaution instructions of the Government Safety Organisation of the chemical industry when working with this material. Please follow safety advices !

Waste Disposal

According to arrangement with local authorities cured material can be disposed as domestic or commercial waste.

Non-cured products are waste which is subject to inspection and has to be disposed accordingly.

In case of further questions please do not hesitate to contact our Department for Product Safety.

The instructions and recommendations are given in good faith and are based on long experience and careful tests. Since the conditions of use are beyond our control, and due to versatility of applications and working methods, we can't give any guarantee. All information are non-binding and are no guarantee for special characteristics or properties of the product. Despite information given from **ebalta** the customer has to make his own tests regarding applications and processing. If any special warranty is requested, written agreement on this subject is essential.