

EP 6476/V1

Quick-hardening epoxied casting resin

Accessories for connecting elements

- For cap-sealing connection elements in work areas, storage places and route installations
- Sealing for optical plug connectors, tension-resistant and tight against pressurised water



General product information

Advantages:

- Small package: component A 69.3 g and B 20.7 g
- The low-viscosity material with high mechanical strength has an excellent adhesion to various materials:
 - Plastics: PE, PP, PVC etc., metal casing
 - Strength members made of aramide or glass
 - GFRP pulling and supporting members coated with epoxide, polyester resin or vinylester resin
- Excellent dimensional stability, even under long-term stress and temperature change
- Short hardening time (suitable for cap-sealing in works areas, storage places or route installations)
- Pot life (Processing time): ~ 2-4 min, hardening time: ~ 3 hours, tensile load 7d.
- Shelf life: 18 months at storage temperature +5 °C to +30 °C
- Keeps for 18 months, if stored in original sealed package

Recommendation:

For speeded-up hardening (at an installation temperature of less than +20 °C), the tin of resin and the metal connector should be warmed up to approx. +25 °C to +30 °C.

At temperatures over +35 °C the processing time is reduced to approx. 1.5 min.

For good adhesion to materials such as GFRP, it is recommendable to keep the resin tin at a constant temperature by standing it in water or covering it with a damp cloth.

Quick-drying epoxide resin EP 6476/V01

Description:

EP 6476/V1 is a two-component, solvent-free resin with an epoxy resin base. This low-viscosity material hardens in a very short time to form a solid mass with high mechanical strength and good temperature resistance.

EP 6476/V1 adheres well to metals and a range of plastics.

Applications:

EP 6476/V1 is used for den encapsulating small areas. It is suitable for insulating electrical components, to relieve strain on cables and to provide a tension-resistant seal for optical plug connectors that is effective against pressurised water and gas.

Due to its high thermic stability, it can also be used for encapsulation rotors and stators on small-sized motors.

If EP 6476/V1 is simply used as a glue on non-porous surfaces, it is enough to apply it to one of the surfaces, and no waiting time is necessary before joining them.

Special properties:

For layer thicknesses of less than 1 cm, there may be risk of a violent exothermic reaction (explosion), depending on the surrounding temperature.

Processing tips:

The surface must be clean and free from dust or grease.

Mix components A + B till they form a homogenous mass. To do this, add component B to the containing component A and mix thoroughly. The mixture may also be poured into a clean container for further mixing.

Tool-cleaning:

With a thinner.

Chemical basis

Properties of the liquid EP 6476/V01 resin			
Property	Standard	Component A	Component B
Viscosity	DIN EN ISO 3219	1.5 - 2.5 Pas	1 - 2 Pas
Mixing viscosity	DIN EN ISO 3219	2 - 5 Pas	
Density (at 20 °C)	DIN 53479	1.15 - 1.25 g/cm³	1.05 – 1.15 g/cm³
Mixing proportions		77 parts by weight	23 parts by weight
Colour of the mixture		green	
Pot life	DIN VDE 0291-2	2 - 4 min	
Conditions of storage	18 months if kept in the original sealed container in a cool and dry place (ideal storage temperature: +5 °C to +30 °C). Stir briefly before use.		

Chemical basis

Properties of the hardened EP 6476/V01 resin			
Property		Standard	Value
Hardness	Shore hardness A	DIN 53505	~
	Shore hardness D	DIN 53505	75 – 85
	Pendulum hardness (Konig test)	DIN 53157	165 - 195 s
Tensile test	Tensile strength Elongation at rupture	DIN EN ISO 527	40 MPa 9.7 %
	Tensile strength Fibre optic cable closure	DIN EN 61300-2-4	Fibre Optics CT PB No. 135/2019 (available on request)
Three-point bending test	Bending resistance Bending module	DIN EN ISO 178	19.5 MPa 575 MPa
Glas transition temperature		DIN IEC 61006	
Burning behaviour	Flammability/DIN Flammability/UL	DIN EN ISO 1210 UL 94	
Storage/Weight loss	120 °C/ 7 days / air 120 °C/42 days / air 150 °C/ 7 days / air 150 °C/42 days / air	Internal testing specification	
Temperature index	Criterion Weight loss 8 %	DIN IEC 60216	
Thermal ageing 20000 h		DIN IEC 60085	
Temperature resistance		-	-25 °C to +150 °C
Thermal conductivity		ISO 8894-1	
Water uptake	20 °C/7 days	ISO 62	
Chemical resistance		Internal testing specification	motor oil, rape-seed bio-diesel, tenside solutions, water
Insulation resistivity	Layer thickness 2 mm	DIN IEC 60167	$1 * 10^{13} \Omega$
Volume resistivity	Layer thickness 2 mm	DIN IEC 60093	
Dielectrice strength		DIN IEC 60243-1	

Installation

Processing and hardening times of EP 6476/V01 resin

Resin type	Processing time [~ min]	Hardening time [~ hours]	Tensile stress after
EP 6476/V1	2 - 4	3	7d

To speed up the hardening process of the resin (at an installation temperature of less than +35 °C) heat the tin and the cable closure to approx. +35 °C. At temperatures over +35 °C the processing time is reduced to approx. 1.5 min. We recommend keeping the resin at a constant moderate temperature (by standing in water or wrapping in a warm damp cloth etc.).

.../Installation

Procedure

- Stir the resin thoroughly in the tin.
- Empty the entire contents of the hardener into the resin tin.
- Stir both components thoroughly with a wooden stirring rod until the mixture is homogenous (an even greenish colour).

Important

When the instructions for handling the resin mixture in the tin are properly followed there should be no direct contact with eyes or skin. Should this nevertheless occur, wash the affected area immediately with plenty of water as the mixture is corrosive. Eyes are better treated with boracic lotion, though clear water can also be used. Consult a doctor.

Storage and transportation

The product will keep for at least 18 months from the delivery date if kept in a dark, dry place, stored in rooms or containers at a constant temperature of +15 °C to +20 °C.

Product range

Prod. No.	Contents per packing unit (P.U.)		
35.1 EP6476/V1-60	60 tins of 69.3 g each/comp. A 60 tubes of 20.7 g each/comp. B 60 pcs. of stirring spatula, 60 copper sleeves		
35.1 EP6476/V1-10	10 tins of 69.3 g each/comp. A 10 tubes of 20.7 g each/comp. B 10 pcs. of stirring spatula, 10 copper sleeves		

Accessories:

	50 ml disposable syringe		
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Information on dangerous goods:

Component A: no good of class A
Component B: limited amount (8 II)
Dangerous goods worth: 0

Supplier

Your local sales partner

National sales



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