

Biresin® G30

EP-Casting resin, all-purpose applicable

Areas of Application

- Manufacture of foundry patterns and metal sheet forming tools
- Manufacture of appliances and other tools
- With hardener **Biresin® S10** for fast gelling gelcoats with good spreading properties

Product Benefits

- Good true-to-size properties and low shrinkage
- Good surface quality, dense structure and good temperature resistance
- With hardener **Biresin® G30** for true-to-size mouldings with relatively short demoulding time with casting thickness from approx. 1.5 up to 35 mm
- With hardener **Biresin® F4** for good flowable mixtures with decreased viscosity

Description

- Basis Two-component-epoxy-system
- Resin **Biresin® G30**, epoxy resin, black, filled
- Hardener **Biresin® G30**, standard hardener, amine, colourless, unfilled
- Hardener **Biresin® F4**, amine, colourless, unfilled
- Hardener **Biresin® S10**, amine, amber, unfilled

Processing Data		Resin		Hardener	
Individual components		Biresin® G30	Biresin® G30	Biresin® F4	Biresin® S10
Viscosity, 25°C	mPas	appr. 40.000	approx. 3.500	< 10	approx. 4.400
Density	g/ml	2.3	0.98	0.87	1.05
Mixing ratio	in parts by weight	100	10	5	5
		Mixtures			
Mixed viscosity, 25°C	mPas	appr. 20.000	appr. 25.000	appr. 25.000	appr. 25.000
Potlife, 500 g, RT	min	60	45	20	
Demoulding time, RT	h	12 - 16	24 - 48	> 12	

Physical Data (approx.-values)

Biresin® G30 resin		with hardener	Biresin® G30	Biresin® F4	Biresin® S10
Density	ISO 1183	g/cm³	2.1		
Shore hardness	ISO 868	-	D 87	D 88	D 88
E-Modulus	ISO 178	MPa	6,800	8,500	8,500
Flexural strength	ISO 178	MPa	54	53	51
Compressive strength	ISO 604	MPa	96	109	139
Impact resistance	ISO 179	kJ/m²	6	7	4
Heat distortion temperature	ISO 75B	°C	67	63	65
Linear shrinkage	internal	%	0.05	0.03	-

Packaging

Working packages	Biresin® G30 A+B Pack	6 x 1.5 kg net resin + 6 x 0.15 kg net Biresin® G30 hardener in a box
Individual components	Biresin® G30 resin Biresin® G30 hardener Biresin® F4 hardener Biresin® S10 hardener	25 kg; 5 kg net 2.5 kg; 0.5 kg net 2.5 kg net 2.5 kg; 0.5 kg net



Processing

- The material temperature must be 18 - 25°C.
- The resin component must be mixed thoroughly before use.
- Take care that resin and hardener is mixed thoroughly without air entrapment.
- The resin mix can be poured, beginning at the lowest point into previously released moulds (e. g. with Sika® Trennmittel 810, 815 Quick resp. Sika® Trennwachs 818, for more information see Technical Data Sheet).
- For cleaning of cured mouldings from wax residues we recommend Sika® Reinigungsmittel 5.
- Before application of other cleaners test their compatibility with resin.

Storage

- Minimum shelf life of Biresin® S10 hardener is 24 month, of Biresin® G30 resin and G30 hardener resp. of Biresin® F4 hardener 12 month under room condition (18 - 25°C), when stored in original un-opened containers.
- After prolonged storage at low temperature, crystallisation of components may occur. This is easily removed by warming sufficient time to a maximum of 70°C. Allow to cool to room temperature before use.
- Containers must be closed water tight immediately after use and prevented from moisture. The residual material has to be used up as soon as possible.

Health and Safety Information

For information and advice on the safe handling and storage of products, users should refer to the current Safety Data Sheet containing physical, ecological, toxicological and other safety related data.

Disposal considerations

Product Recommendations: Must be disposed of in a special waste disposal unit in accordance with the corresponding regulations.

Packaging Recommendations: Completely emptied packagings can be given for recycling. Packaging that cannot be cleaned should be disposed of as product waste.

Value Bases

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

Legal Notice

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