

Biresin® VG70 Vacuum Casting resin

Areas of Application

- Manufacture of rubber-like, flexible prototype parts
- Manufacture of sealing, bellows and other rubber-like mouldings
- Manufacture of thinwalled mouldings with complex structure

Product Benefits

- Simulation of rubber and soft PVC
- Fast curing with good flowability
- Very flexible

Description

- Basis Two-component-PUR-system
- Resin **Biresin® VG70**, polyol, black, unfilled
- Hardener **Biresin® G53**, MDI-based isocyanate, amber, unfilled

Processing Data		Resin	Hardener
Individual Components		Biresin® VG70	Biresin® G53
Viscosity, 25°C	mPas	ca. 1.200	ca. 175
Density	g/cm³	1,06	1,23
Mixing ratio resin to hardener	in parts by weight	100	18
		Mixture	
Mixed viscosity, 25°C	mPas	approx. 900	
Potlife, 500 g, RT	min	5 - 6	
Demoulding time at 70°C mould temperature	min	45 - 60 (dependent on thickness)	
Curing time, RT	d	1	

Physical Data (approx.-values)

Biresin® VG70 resin			with hardener	Biresin® G53
Colour				black
Density	ISO 1183	g/cm³		1.1
Shore hardness	ISO 868	-		A 70*
Tensile strength	ISO 527	MPa		5*
Elongation at break	ISO 527	%		200*
Tear resistance	ISO 34	N/mm		9

* values after post curing: 1 h / 70°C + 7 d / nc (23°C / 50%rh)

Packaging

Working packages	Biresin® VG70 A+B Pack	6 x 1.0 kg net resin + 6 x 0.18 kg net hardener in a box
Individual components	Biresin® VG70 resin Biresin® G53 hardener	5 kg net 0.9 kg net



Processing

- The material temperature must be 18 - 25°C.
- The resin component must be stirred thoroughly before use.
- Both components must be under vacuum for several minutes before mixing in right mixing ratio and poured into preheated moulds (70°C).
- After complete filling of the moulds, vacuum is switched off and moulds are placed in an oven at 70°C for curing until demoulding.

Storage

- Minimum shelf life is 6 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 up for a sufficient time to a maximum of 70°C. Allow to cool to room temperature before use.
- Containers must be closed tightly immediately after use to prevent moisture ingress. The residual material needs to be used up as soon as possible.

Health and Safety Information

For information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the actual Material Safety Data Sheets 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.

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