

Biresin® VG185 HT Vacuum Casting resin

Areas of Application

- Manufacture of heat and impact resistant housings, coverings and other mouldings
- Manufacture of thinwalled parts with complex structure

Product Benefits

- Simulation of ABS
- Very high heat resistance
- Impact resistant with high rebound elasticity

Description

- Basis Two-component-PUR-system
- Resin **Biresin® VG185 HT**, polyol, black, unfilled
- Hardener **Biresin® G56**, isocyanate, colourless, unfilled

Processing Data		Resin	Hardener
Individual Components		Biresin® VG185 HT	Biresin® G56
Viscosity, 25°C	mPas	approx. 500	approx. 2.700
Density	g/cm³	1.15	1.13
Mixing ratio resin to hardener	in parts by weight	80	100
Mixture			
Mixed viscosity, 25°C	mPas	approx. 1,700	
Potlife, 500 g, RT	min	6 - 7	
Demoulding time at 70°C mould temperature	min	> 45	
Curing time, RT	d	1 - 3	

Physical Data (approx.-values)

Biresin® VG185 HT resin		with hardener	Biresin® G56
Colour			black
Density	ISO 1183	g/cm³	1.2
Shore hardness	ISO 868		D 83*
E-Modulus	ISO 178	MPa	1,850*
Flexural strength	ISO 178	MPa	95*
Impact resistance	ISO 179	kJ/m²	50*
Heat distortion temperature	ISO 75B	°C	95* / 120**

* values after post curing: 1 h / 70°C
** value after post curing: 2 h / 120°C

Packaging

Individual components	Biresin® VG185 HT resin	4 kg; 0.8 kg net
	Biresin® G56 hardener	5 kg; 1 kg net

Processing

- The resin component must be stirred thoroughly before use.
- The processing temperature of resin component must be 20 - 35°C and the hardener component at least 20°C. 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.
- Improved thermal stability of the demoulded mouldings can be obtained by thermal post curing.

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.

Legal Notice

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