Technical Data Sheet
Version 02 / 2008

SCABRO
Ideeën Krijgen Vorm

Tooling & Composites

Biresin® G27 LR
PUR - Vacuum Casting resin

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

Product Benefits
- Simulation of PE/PP
- With hardener **Biresin® G27 weiß** for increased flowability and higher impact resistance
- For excellent surface detail reproduction, especially with hardener **Biresin® G27 weiß**
- Dyeable with **Biresin®-Farbpasten**
- Can be cured at RT

Description
- Basis: Two-component-PUR-system
- Resin: **Biresin® G27 LR**, polyol, beige, unfilled
- Hardener: **Biresin® G27**, MDI-based isocyanate, brown, unfilled
- Hardener: **Biresin® G27 weiß**, MDI-based isocyanate, white, unfilled

Processing Data		Resin	Hardener	
Individual components		**Biresin® G27 LR**	**Biresin® G27**	**Biresin® G27 weiß**
Viscosity, 25°C	mPas	approx. 50	approx. 60	approx. 13
Density	g/cm³	1.02	1.14	1.13
Mixing ratio resin to hardener	in pbw	100	100	100
		Mixtures		
Mixed viscosity, 25°C	mPas		approx. 120	approx. 30
Potlife, 200 g, RT	min		4 - 5	4 - 5
Demoulding time, RT	min		60 - 90	60 - 90
Curing time, RT	d		3	3

Physical Data (approx.-values)				
Biresin® G27 LR resin		with hardener	**Biresin® G27**	**Biresin® G27 weiß**
Colour			beige	white
Density	ISO 1183	g/cm³	1.1	1.1
Shore hardness	ISO 868	-	D 70	D 70
E-Modulus	ISO 178	MPa	730	920
Flexural strength	ISO 178	MPa	40	40
Tensile strength	ISO 527	MPa	25	22
Elongation at break	ISO 527	%	30	18
Compressive strength	ISO 604	MPa	35	31
Impact resistance	ISO 179	kJ/m²	40	70
Heat distortion temperature	ISO 75B	°C	75	70
Linear shrinkage	internal	%	0.4	0.4

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Packaging

Individual components	**Biresin® G27 LR** resin	5 kg net
	Biresin® G27 hardener	20 kg; 5 kg; 1 kg net
	Biresin® G27 weiß hardener	20 kg; 5 kg; 1 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 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 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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