

# Biresin® RG50 Low pressure RIM-system, rubber-like

# **Areas of Application**

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

# **Product Benefits**

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

# Description

Basis Two-component-PUR-system
 Resin Biresin® RG50, polyol, black, unfilled

■ Hardener Biresin® G53, MDI-based isocyanate, amber, unfilled

Processing Data		Resin	Hardener
Individual components		Biresin® RG50	Biresin® G53
Viscosity, 25°C	mPas	approx. 1,200	approx. 175
Density	g/cm³	1.06	1.23
Mixing ratio resin to hardener	in parts by weight	100	18
Mixing ratio resin to hardener	in parts by volume	100	15
		Mixture	
Potlife, RT	S	100	
Demoulding time, plastic mould, RT	min	15	
Curing time, RT	d	approx. 1	

Physical Data (approxvalues)					
Biresin® RG50 resin	with hardener		Biresin® G53		
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		

# **Packaging**

Individual components

Biresin® RG50 resin

20 kg net

Biresin® G53 hardener

20 kg; 10 kg net



#### **Processing**

- The material and processing temperature must be 18 25°C. Preheated moulds shorten the demoulding
- Before use the resin component must be mixed thoroughly through stirring with as suitable mixing device.
- For processing a two-component dosage mixing machine is necessary which conforms to reactivity of resin and volume of casting parts.
- Machine vessel for resin component (part A polyol) must have a mixing unit and heating.
- Machine vessel for hardener component (Part B isocyanate must be moisture tight, e. g. by installation of a silicagel filter.
- Prior to casting, ensure moulds are thoroughly released. If the application of silicone free release agents is necessary, Sika® Trennmittel 810 and 815 Quick or Sika® Trennwachs 818 (for more information see Technical Data Sheet) are recommended.

#### **Storage**

- Minimum shelf life is 12 month under room conditions (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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