

Biresin® U1406 Elastomeric Casting resin for mould making

Areas of Application

- Casting of flexible moulds for ceramic and gypsum processing
- Manufacture of elastic, flexible mouldings and components

Product Benefits

- Insensitive to moisture
- Excellent flowability at processing
- Rubbery, high elongation at break
- Good tensile strength and elasticity
- Very low shrinkage
- Minimum water absorption
- Bonds good to itself for modification

Description

■ Basis Two-component-PUR-system

■ Resin Biresin® U1406, MDI prepolymer, yellowish-transparent, unfilled

■ Hardener Biresin® U1406, amine, reddish-transparent, unfilled

■ Hardener Biresin® U1405, amine, grey, unfilled

Processing Data		Resin	Hardener	
Individual components		Biresin® U1406	Biresin® U1405	Biresin® U1406
Viscosity, 25°C mPa	as	approx. 3,000	approx. 750	approx. 830
Density		1.03	1.05	1.05
Mixing ratio resin to hardener in parts by weig	ht	100	50	30
		Mixture		
Mixed viscosity, 25°C		mPas	approx. 2,500	approx. 2,800
Potlife, 500 g / RT		min	20	15 - 20
Demoulding time, RT		h	> 16	> 16
Curing time, RT		d	5 - 7	5 - 7

Physical Data (approxvalues)				
Biresin® U1406 resin	W	ith hardener	Biresin® U1406	Biresin® U1406
Colour			grey	yellowish- transparent
Density	ISO 1183	g/cm³	1.05	1.05
Shore hardness	ISO 868	-	A 42	A 55
Tear strength	ISO 34B	N/mm	5,5	12
Tensile strength	ISO 527	MPa	3,5	5
Elongation at break	ISO 527	%	300	450

Packaging

Individual components

Biresin® U1406 resin

Biresin® U1405 hardener

on demand

Biresin® U1406 hardener on demand



Processing

- The material temperature must be 18 25°C.
- The hardener component Biresin® U1406 must be shaked before use.
- The hardener component Biresin® U1405 must be stirred before use.
- Pay attention to dry conditions and dry and clean mould surfaces while processing.
- The resin and hardener components are to be mixed thoroughly and poured immediately into previously released moulds (e. g. with Sika® Trennmittel 810 or 815 Quick resp. Sika® Trennwachs 818, for more information see Technical Data Sheet).
- Porous surfaces (wood, gypsum) have to be well sealed before processing.

Storage

- Minimum shelf life is 12 month under room conditions (18 25°C), when stored in original un-opened
- 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 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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Biresin® U1406+U1405