

Biresin® U1419

Elastomeric Casting resin for foundry pattern making, Shore A 98

Areas of Application

- Casting of abrasion and impact resistant mouldings and tools, e. g. core boxes
- Casting of tough-elastic coatings

Product Benefits

- Insensitive to moisture
- Good abrasion resistance
- Good impact resistance and tensile strength
- Good flowability
- Good temperature resistance
- Dyeable with **Biresin® Farbpasten**
- With **Biresin® U1419L** for increased potlife (see separate Product Data Sheet)

Description

- Basis Two-component-PUR-system
- Resin **Biresin® U1419**, isocyanate prepolymer, colourless-transparent, unfilled
- Hardener **Biresin® U1419**, amine, brownish-transparent, unfilled

| Processing Data | | Resin | Hardener |
|--------------------------------|--------------------|-----------------------|-----------------------|
| Individual components | | Biresin® U1419 | Biresin® U1419 |
| Viscosity, 25°C | mPas | ~ 4,200 | ~ 200 |
| Density | g/ml | 1.01 | 1.02 |
| Mixing ratio resin to hardener | in parts by weight | 100 | 16 |
| | | Mixtures | |
| Mixed viscosity, 25°C | mPas | ~ 2,800 | |
| Potlife, 500 g / RT | min | 6 - 7 | |
| Demoulding time, RT | h | 1 - 3 | |
| Curing time, RT | d | 3 - 5 | |

Physical Data (approx. values)

| Biresin® U1419 resin | | | with hardener | Biresin® U1419 |
|----------------------|----------|-------|---------------|-----------------------|
| Colour | | | | coloured-transparent* |
| Density | ISO 1183 | g/cm³ | | 1.1 |
| Shore hardness | ISO 868 | - | | A 98 (D 54) |
| Tear resistance | ISO 34 | N/mm | | 68 |
| Tensile strength | ISO 527 | MPa | | 25 |
| Elongation at break | ISO 527 | % | | 375 |
| Linear shrinkage | internal | % | | 0.05 |
| Abrasion resistance | ISO 4649 | mm³ | | 90 |

* dependent on raw materials the colour can differ without different mechanical properties



Packaging

| | | |
|-----------------------|---|---|
| Working packages | Biresin® U1419 A+B Pack | 6 x 1 kg net resin + 6 x 0.16 kg net hardener in a box |
| Individual components | Biresin® U1419 resin Biresin® U1419 hardener | 10 kg; 1 kg net 1.6 kg net |

Processing

- The material, processing and mould temperature must be from 18 to 25°C.
- It is possible to add Biresin® Farbpaste to the hardener component before processing if required.
- Pay attention to dry conditions and dry 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 Product 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.
- 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 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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