

PRODUCT DATA SHEET

SikaBiresin® UR572

POLYURETHANE ELASTOMER – SHORE A 70 – POT LIFE 15-20'

APPLICATIONS

- Polyurethane casting elastomer designed to produce molds or flexible parts, by hand casting or with help of 2K machine.

MAIN PROPERTIES

- Friendly use
- Excellent tear strength
- Good resistance against release agents for cement concrete
- Solvent and mercury free

DESCRIPTION

| | |
|-------------|--|
| Basis | Two component polyurethane system |
| Component A | SikaBiresin® UR505 , isocyanate, straw yellow |
| Component B | SikaBiresin® UR572 , polyol, beige |

PHYSICAL PROPERTIES

| | | Isocyanate (A) | Polyol (B) |
|---------------------------|--------------------|---------------------------|---------------------------|
| Components | | SikaBiresin® UR505 | SikaBiresin® UR572 |
| Viscosity, 25 °C | mPa.s | 450 | 1,500 |
| Density, 25 °C | | 1.21 | 1.22 |
| Mixing ratio A:B | in parts by weight | 30 | 100 |
| | In parts by volume | 30 | 100 |
| | | Mixture | |
| Colour | | Beige | |
| Viscosity, 25 °C | mPa.s | ~ 1,000 | |
| Pot life, 25 °C, 130 g | min | 15 – 20 | |
| Maximal casting thickness | mm | 100 | |

MECHANICAL PROPERTIES

approx. values

| | ISO 2781 | g/cm ³ | |
|------------------|----------|-------------------|-------------|
| Density | | | 1.25 |
| Shore hardness | ISO 868 | Shore A1 / A15 | A 75 / A 71 |
| Tensile strength | ISO 37 | MPa | 9 |

| | | | |
|---|-----------|-----------------------|-----|
| Tear strength | ISO 34 | kN/m | 31 |
| BASHORE resilience | ASTM 2632 | % | 30 |
| Elongation at break | ISO 37 | % | 700 |
| Linear shrinkage (1020 x 140 x 100 mm) | Internal | mm/m | 5.9 |
| Abrasion resistance | ISO 5470 | mm ³ /100U | 40 |

THERMAL AND SPECIFIC PROPERTIES

approx. values, hardening conditions 12 h at 80 °C

| | | | |
|------------------------------|-----------|----|-------------|
| Working temperature | - | °C | - 20 / + 70 |
| Glass transition temperature | ISO 11359 | °C | < 0 |

PACKAGING UNITS

- Isocyanate (A), SikaBiresin® **UR505** 1025 kg; 225 kg; 11 kg net
- Polyol (B), SikaBiresin® **UR572** 18.3 kg net

PROCESSING DATA

- The material, processing and model temperature should be at least 18 – 25 °C.
 - Component B POLYOL must be stirred thoroughly before use.
 - Mix ratio accuracy is 2% by weight.
 - Could be mix by hand in appropriate container or with a 2K machine (check before with customer compatibility of the machine).
 - Porous surfaces (wood-plywood, stone, plaster etc.) must be well sealed and dry before casting UR 58720
 - Use of PUR foam plates with low to middle density is not advised in any cases.
 - The compatibility of the sealing on PUR foam should be tested separately.
 - We recommend wax based release agents to release UR 58720 from models. For more information, see Product Data Sheets of the release agents.
 - Both components must be mixed thoroughly according to mixing ratio and poured immediately on the released model.
 - Demoulding after one night at RT.
 - To achieve the highest properties, leave the mould at 23 °C for 5 days before any use.
- To ensure a long lasting we provide under request a compatibility checking with the release agent for concrete used in production.

STORAGE CONDITIONS

| | | |
|---------------------|--|------------|
| Shelf life | ■ Isocyanate (A), SikaBiresin® UR505 | 9 months |
| | ■ Polyol (B), SikaBiresin® UR572 | 9 months |
| Storage temperature | ■ Isocyanate (A), SikaBiresin® UR505 | 18 – 25 °C |
| | ■ Polyol (B), SikaBiresin® UR572 | 18 – 25 °C |
| Crystallization | <ul style="list-style-type: none"> ■ After prolonged storage at low temperature, crystallization of Isocyanate (A) may occur. ■ This is easily removed by warming up for a sufficient time to a maximum of 60 °C. ■ Allow to cool to requested processing temperature before use. | |
| Opened packagings | <ul style="list-style-type: none"> ■ Containers must be closed tightly immediately after use to prevent moisture ingress. ■ The residual material needs to be used up as soon as possible. | |

FURTHER INFORMATION

The information herein is offered for general guidance only. Advice on specific applications is available on request from the Technical Department of Sika Advanced Resins. Copies of the following publications are available on request: Safety Data Sheets

BASIS OF PRODUCT DATA

All technical data stated in this document are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

HEALTH AND SAFETY INFORMATION

For information and advice regarding transportation, handling, storage and disposal of chemical products, users shall refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

LEGAL NOTICE

The information, and, in particular, the recommendations relating to the application and enduse of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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