

Biresin® VG70 Vacuum Casting resin

Areas of Application

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

Product Benefits

- Simulation of rubber and soft PVC
- Fast curing with good flowability
- Very flexible
- Dyeable with **Biresin® Colour Paste**

Description

- Basis Two component PUR system
- Component A **Biresin® VG70**, polyol, black, unfilled
- Component B **Biresin® G53**, MDI-based isocyanate, amber, unfilled

| Processing Data | | Component A | Component B |
|----------------------------|--------------------|----------------------------------|---------------------|
| Individual Components | | Biresin® VG70 | Biresin® G53 |
| Viscosity, 25°C | mPa.s | ~ 1.200 | ~ 175 |
| Density | g/cm³ | 1,06 | 1,23 |
| Mixing ratio A : B | in parts by weight | 100 | 18 |
| | | Mixture | |
| Mixed viscosity, 25°C | mPa.s | ~ 900 | |
| Potlife, 500 g, RT | min | 5 - 6 | |
| Demoulding time, tool 70°C | min | 45 - 60 (dependent on thickness) | |
| Curing time, RT | d | 1 | |

Physical Data (approx. values)

| Biresin® VG70 (A) | | with component B | Biresin® G53 |
|---------------------|----------|------------------|--------------|
| Colour | | | black |
| 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 |

* values after post curing: 1 h / 70°C + 7 d / nc (23°C / 50%rh)

Packaging

| | | |
|-----------------------|--------------------------|--------------|
| Individual components | Biresin® VG70 (A) | 5 kg net |
| | Biresin® G53 (B) | 0.975 kg net |

Processing

- The material temperature must be 18 - 25°C.
- Component A 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 silicone 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 6 month under room condition (18 - 25°C), when stored in original un-opened containers.
- 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, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) 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.

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Further information available at:

Sika Deutschland GmbH
Subsidiary Bad Urach
Stuttgarter Str. 139
D - 72574 Bad Urach
Germany

Tel: +49 (0) 7125 940 492
Fax: +49 (0) 7125 940 401
Email: tooling@de.sika.com
Internet: www.sika.com

