

## Biresin® VG240

### Vacuum Casting resin

#### Application

- Manufacture of very impact resistant housings, coverings and other mouldings
- Manufacture of thinwalled parts with complex structure

#### Properties

- Simulation of ABS
- Transparent (slight yellowish)
- Stiff, very high impact resistance
- Dyeable with **Biresin®-Farbpasten**

#### Description

- Basis Two-component-PUR-system
- Resin **Biresin® VG240**, polyol, transparent, unfilled
- Hardener **Biresin® G55**, MDI-based isocyanate, yellowish-transparent, unfilled

#### Processing Data

| Individual components                     |                    | Resin                 | Hardener            |
|---|--------------------|-----------------------|---------------------|
|   |                    | <b>Biresin® VG240</b> | <b>Biresin® G55</b> |
| Viscosity, 25°C                           | mPas               | approx. 2,300         | approx. 250         |
| Density                                   | g/cm³              | 1.10                  | 1.22                |
| Mixing ratio resin to hardener            | in parts by weight | 57                    | 100                 |
| Mixture                                   |                    |                       |                     |
| Mixing viscosity, 25°C                    | mPas               | approx. 950           |                     |
| Potlife, 500 g / 20°C                     | min                | 8                     |                     |
| Demoulding time at 70°C mould temperature | min                | approx. 60            |                     |
| Curing time                               | d                  | 1 - 3                 |                     |

#### Physical Data (approx.-values)

| Biresin® VG240 Resin        |          | with hardener | Biresin® G55          |
|-----------------------------|----------|---------------|-----------------------|
| Colour                      |          |               | yellowish-translucent |
| Density                     | ISO 1183 | g/cm³         | 1.2                   |
| Shore hardness              | ISO 868  |               | D 83                  |
| E-Modulus                   | ISO 178  | MPa           | 2,400                 |
| Flexural strength           | ISO 178  | MPa           | 115                   |
| Tesile strength             | ISO 527  | MPa           | 85                    |
| Elongation at break         | ISO 527  | %             | 5                     |
| Impact resistance           | ISO 179  | kJ/m²         | 110                   |
| Heat distortion temperature | ISO 75B  | °C            | 80 / 90*              |

\* values after post curing: 1 h / 70°C + 1 h 100° C

## Delivery

|                       |                              |                |
|-----------------------|------------------------------|----------------|
| Individual components | <b>Biresin® VG240 resin</b>  | 2.85 kg net    |
|                       | <b>Biresin® G55 hardener</b> | 5 kg; 1 kg net |

## Processing

- The resin component must be stirred thoroughly before use.
- The processing temperature of resin component must be 20 - 35°C and the hardener component at least 20°C. Both components must be under vacuum for several minutes before mixing and poured into preheated 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.
- After prolonged storage at low temperature, crystallisation of components may occur. This is easily removed by warming sufficient time to a maximum of 70°C. Allow to cool to room temperature before use.
- Containers must be closed water tight immediately after use and prevented from moisture. The residual material has to be used up as soon as possible.

## Precautions

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.

The information, and, in particular, the recommendations relating to the application and end-use 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 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 proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied upon request.



**SCABRO**  
Ideeën Krijgen Vorm

Distributeur voor Nederland, België en Luxemburg: Scabro Composites

Vliegveld Valkenburg Wassenaarseweg 75-3265 NL - 2223 LA Katwijk The Netherlands  
Tel: +31 (0) 71 4017246 Fax: +31 (0) 84 7402572 Email: info@scabro.com www.scabro.com