WACKER

POWERSIL® 466 LV A/B

Liquid Silicone Rubber (LSR)

POWERSIL® 466 LV A/B is a liquid silicone rubber with medium conductivity and excellent mechanical properties.

Properties

- ready-to-use, two-component system
- high elongation at break, low tension set
- stable electrical properties
- good mechanical properties

Specific features

- Cold-shrinkable
- Electrically conductive
- Low viscosity

Technical data

Properties Uncured

| Property | Condition | Value | Method |
|--|-----------|--------------|-----------------|
| Viscosity, dynamic of Component A (10 s ⁻¹) | - | 435000 mPa⋅s | DIN EN ISO 3219 |
| Viscosity, dynamic of Component B (10 s ⁻¹) | - | 360000 mPa⋅s | DIN EN ISO 3219 |
| Mix ratio | - | 1:1 | A : B |

These figures are only intended as a guide and should not be used in preparing specifications.

Properties Catalyzed A+B

| Property | Condition | Value | Method |
|--|-----------|--------------|-----------------|
| Viscosity, dynamic (10 s ⁻¹) | - | 400000 mPa·s | DIN EN ISO 3219 |
| Kick-off temperature | - | 115 °C | - |
| Pot Life | 23 °C | 3 d | - |

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Properties Cured

Cure conditions: 5 min / 165 $^\circ C$ and post-cured for 1 h at 200 $^\circ C$

| Property | Condition | Value | Method |
|--------------------------------|---------------|------------------------|----------------------------------|
| Appearance | - | black | - |
| Hardness Shore A | - | 32 | DIN ISO 48-4 |
| Density | - | 1.06 g/cm ³ | DIN EN ISO 1183-1 A |
| Tensile strength | - | 7.0 N/mm ² | ISO 37 type 1 |
| Elongation at break | - | 650 % | ISO 37 type 1 |
| Tear strength | - | 20 N/mm | ASTM D 624 B |
| Compression Set ⁽¹⁾ | 22 h 175 °C | 11 % | DIN ISO 815-1 type B method A |
| Volume resistivity | - | 50 Ohmcm | IEC 62631-3-1 |
| Modulus at 100 % elongation | - | 0.7 N/mm² | ISO 37 type 1 |
| Modulus at 300 % elongation | - | 2.3 N/mm ² | ISO 37 type 1 |
| Tension set | - | < 5 % | ISO 2285 |

¹post-cured 6 h / 200 °C

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All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

Applications

Cable Accessories

Application details

POWERSIL® 466 LV A/B is suitable for production of electrically conductive injection moulded articles, especially cable accessories in the medium and high voltage range.

The range of use spreads from push-on accessories to cold shrink applications. POWERSIL® 466 LV A/B combines a low Shore A durometer with high elongation, good setting properties (low tension set) and good mechanical properties which are a must for cold shrink applications.

POWERSIL® 466 LV A/B is a low viscosity LSR that shows excellent processing properties.

Processing

Components A and B are delivered ready to use in drums of 20 and 200 litres capacity. They can be pumped by means of standard metering equipment from these drums and mixing in a static mixer straight into the heated mold.

The mixing ratio is 1 : 1. At room temperature, mixtures of A and B components have a pot life of at least three days.

For detailed information, refer to brochures on www.wacker.com.

Packaging and storage

Storage

The 'Best use before end' date of each batch is shown on the product label.

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site http://www.wacker.com.

QR Code POWERSIL® 466 LV A/B



For technical, quality or product safety questions, please contact:

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