

# Stobicast® L 653.00



## General product information

This is a UV-light stable, transparent and flexible two component polyurethane casting resin. This casting was especially developed for the manufacture of small parts in the electrical industry with a low viscosity in mixture.

The casting does not contain any halogen- or heavy metal components. It complies with the **RoHS** (2002/95/EG) and electronic waste regulation **WEEE** (2002/96/EG directive of the EU).

Stockmeier Urethanes  
GmbH & Co. KG

Im Hengstfeld 15  
32657 Lemgo  
Germany

T +49-5261 / 66068-0  
F +49-5261 / 66068-29

urethanes.ger@stockmeier.co  
m

[www.stockmeier-urethanes.com](http://www.stockmeier-urethanes.com)

## Typical properties at 20°C

	Polyol	Polyisocyanate	Mixture
Density [g/cm <sup>3</sup> ] DIN 53217/1+2	1.02	1.14	1.07
Viscosity [mPa·s] DIN 53019/1	700	170	400
Mixing ratio by weight	100	50	

**Pot life (DIN 16945/1)** from 1 till 50 minutes at 20°C possible

**Colour** clear, transparent

## Curing profile

The curing time depends at room temperature on the pot life, cast quantity, resin- and mould temperature. Heat application will accelerate the curing (e. g. 4 h at 60°C).

**Important:** please stir both components very carefully to avoid bubbles in the mixture.

## Typical physical and electrical properties of tempered casting resin

( 48 hours at room temperature)

### Physical properties

<b>Shore hardness</b>	65 A	<b>DIN EN ISO 868</b>
<b>Tensile strength</b>	2,3 N/mm <sup>2</sup>	<b>DIN 53455</b>
<b>Elongation at break</b>	75 %	
<b>Impact strength</b>	20 kJ/m <sup>2</sup>	<b>DIN 53453</b>
<b>Thermal conductivity</b>	0,15 WK <sup>-1</sup> m <sup>-1</sup>	<b>DIN 52612</b>
<b>Temperatur indice</b>	128 °C	<b>IEC 216</b>
<b>Glass transition temperature</b>	-20 °C	<b>DSC</b>
<b>Water adsorption</b>	86 mg in 24 h (0.84%) 165 mg in 96 h (1.68%)	<b>DIN 53495</b>
<b>Linear thermal expansion coefficient</b>	140 10 <sup>-6</sup> K <sup>-1</sup>	<b>DIN 53752</b>

### Electrical properties

<b>Dielectrical strength ED</b>	28 KV/mm	<b>IEC 243</b>
<b>Surface resistivity ROC</b>	10 <sup>13</sup> Ω	<b>IEC 93</b>
<b>Spec. current flow</b>	10 <sup>13</sup> Ω cm	<b>IEC 93</b>
<b>Tracking resistivity</b>	CTI>600 V	<b>IEC 112</b>
<b>Electrolytic corrosion</b>	1.2 A	<b>VDE 0303/6</b>

<b>Temperature</b>	<b>Dissipation factor at 50 Hz (VDE 0303/4)</b>	<b>Dielectric constant at 50 Hz (IEC 250)</b>
23 °C	tan δ = 0,09	ε <sub>r</sub> = 5,9
80 °C	tan δ = 0,12	ε <sub>r</sub> = 8,1

### Processing Conditions

The processing is done by preference with a two component metering and mixing machine. These machines enable a working with short pot lives and demoulding cycles. The parts to be cast should be clean, dry and free from grease.

### **Precaution**

Material safety data sheet should be read very carefully before use.

### **Packaging**

200 L drums. Others size on request.

### **Storage life**

Both components must be protected against humidity. Do not store at temperature below + 5 °C. 15 - 25°C is the most favourable storage temperature. Original closed drums can be stored for at least 6 months at ambient temperature.

**Important:** in the case of open drums the polyol component will collect humidity from the air; the moisture could be the reason of the formation of bubbles in the final casting. Open drums should be worked up as soon as possible.

### **Notice**

The information herein is based on our present experience and is believed to be correct. Notice of legal requirements and existing patent rights has to be taken.

**04/2009**