



## Stobicast® L 777.86



### General product information

Elastic 2-component polyurethane casting compound with excellent electrical and mechanical properties. Due to its high insulation strength, flexibility and good resistance to water and other chemicals it is well suited for the insulation of low voltage components as transformers, EMI filters, electronics, sensors and others.

The casting compound is **UL 94 V-0** recognized as self-extinguishing having an **RTI** of 130 °C (UL file 302173). Also, it fulfils the requirements of the Household Appliances Standard IEC 60 335 having **GWFI** of 850 °C and **GWIT** of 850 °C.

It complies with the **RoHS** (2002/95/EG) and electronic waste regulations (2002/96/EG **WEEE** 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.com

www.stockmeier-urethanes.com

### Typical properties at 25°C

	Polyol	Polyisocyanate	Mixture
Density [g/cm <sup>3</sup> ] DIN 53217/1+2	1,44	1,22	1,40
Viscosity [mPa·s] DIN 53019/1	2500	180	1200
Mixing ratio by weight	100	20	

**Pot life (DIN 16945/1)** from 3 to 100 minutes at 20°C possible

**Colour** black

### Curing profile

The curing time at room temperature depends on the pot life, cast quantity, resin- and mould temperature. Heat application will accelerate the curing (e. g. 4 h at 100°C).

**Typical physical and electrical properties of tempered casting resin**

(16 hours at 80°C)

<b>Shore hardness</b>	D 45	DIN EN ISO 868
<b>Tensile strength</b>	7 N/mm <sup>2</sup>	DIN 53455
<b>Elongation at break</b>	100 %	
<b>Notched impact strength</b>	13 kJ/m <sup>2</sup>	DIN 53453
<b>Impact strength</b>	33 kJ/m <sup>2</sup>	DIN 53453
<b>Flammability (UL file E 302173)</b>	V 0 V 1	UL 94 (3 mm) UL 94 (1,5 mm)
<b>Fire &amp; Smoke Class (railway installations)</b>	I3 F1	NF16-101/102
<b>Glow wire ignition temperature (GWIT)</b>	850 °C / 3,0	IEC 60695-2-13
<b>Glow wire flammability index (GWFI)</b>	850 °C / 3,0	IEC 60695-2-12
<b>Glass transition temperature</b>	0°C	DSC
<b>Relative temperature index (UL file E 302173)</b>	130 °C	UL 746 B
<b>Water absorption</b>	36 mg in 24 h 63 mg in 96 h	DIN 53495
<b>Heat conductivity</b>	0,7 W/Km	DIN 52612
<b>Coefficient of linear expansion</b>	120 · 10 <sup>-6</sup> K <sup>-1</sup>	DIN 53752
<b>Dielectric strength</b>	24 kV/mm	IEC 243
<b>Surface resistance</b>	10 <sup>14</sup> Ω	IEC 93
<b>Volume resistance at 20 °C</b>	10 <sup>14</sup> Ω cm	IEC 93
<b>Tracking resistance</b>	CTI>600 V	IEC 112
<b>Electrolytic corrosion</b>	A / 1.2	VDE 0307

**Dielectric properties at 50 Hz (IEC 250)**

<b>Temperature</b>	<b>Dissipation factor</b>	<b>Dielectric constant</b>
23 °C	tan δ = 0,050	ε <sub>r</sub> = 4,3
50 °C	tan δ = 0,070	ε <sub>r</sub> = 5,4
80 °C	tan δ = 0,080	ε <sub>r</sub> = 7,0

## **Processing recommendations**

The polyol component has to be stirred and homogenized thoroughly prior to use. Processing is done by preference with a two component metering and mixing machine. These machines enable a working with short pot life's and demoulding cycles.

## **Pre-treatment**

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 sizes on request.

## **Storage**

Both components must be protected against humidity. Do not store at temperature below + 5 °C. 15 - 25°C is the most favourable storage temperature

## **Shelf life**

Original closed drums can be stored for at least 6 months at ambient temperature. After a long storage period, the resin component should be stirred well before use.

## **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.

## **Edition 08/2012**

All provided informations concerning our products, including but not limited to, any recommendations and advice relating to the application and use of our products, is given in good faith based on our current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with our instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of our control are such that we assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of our product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s).