

Stobicast® E 555.00

General product information

Stobicast® E 555.00 is part of a range of high performance room temperature curing multipurpose elastomers.

Utilising a technically advanced formula it offers a compliant, future safe solution without compromise on processing. Containing no mercury or plasticiser it provides a REACH ready solution and complies with RoHS.

Easy to mix, even by hand methods, it readily cures at room temperature with gel times suitable for both large and small volume castings.

Once cured this range gives high tear, elongation and tensile with excellent low temperature flexibility.

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 applications:

Cast moulds requiring high elastomeric performance specifically in the concrete and decorative casting market.

Low cost roller coatings

Cast elastomeric parts to replace rubber or provide a low cost solution where injection moulding or extrusion is not possible.

Electronic assembly typically cast housings, potting or cable sealing to provide tough impact, abrasion and chemical resistance

Subsea and marine coatings and castings

Bumper stops

Filter end cap castings where a degree of compression and high tear is required to facilitate a seal

Dunnage / protective pallet systems for the automotive industry

Protoypes parts

Animatronics and special FX castings and moulds

Typical properties at 20 °C

	Polyol Stobicast [®] E 555.00	Polyisocyanate Stobicast® E 564.00	Mixture
Density [g/cm³] DIN 53217/2	1,22	1,20	1,21
Viscosity [mPa·s] DIN 53018/1+2	2000	300	1000

Mixing ratio by weight	100	22	
weight			

Colour:

unpigmented

Pot life:

a range from 2 till 20 minutes is possible

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 100°C).

Typical values of cured casting

Shore hardness	A 65	DIN EN ISO 868
Tensile strength	3,5 N/mm ²	DIN 53455
Elongation at break	430 %	DIN 53455
Tear resistance	12 N/mm	DIN 53356
Water adsorption	28 mg in 24 h 66 mg in 96 h	DIN 53495
Linear thermal expansion coefficient	110 10 ⁻⁶ K ⁻¹	DIN 53752
Dielectrical strength ED	20 kV/mm	IEC 243
Surface resistivity ROC	$10^{12} \Omega$	IEC 93
Spec. current flow	10 ¹² Ω cm	IEC 93

Dissipation factor at 50 Hz (VDE 0303/4)

23°C	$\tan \delta = 0.13$
50°C	tan δ = 0,18
80°C	tan δ = 0,25

Dielectric constant at 50 Hz (IEC 250)

23°C	$\varepsilon_{\rm r}=4.0$

50°C	ε _r = 5,1
80°C	ε _r = 6,0

Processing Conditions

The resin component should be stirred well before using. Processing is possible both by hand mix and machine methods. These machines enable a working with short pot life's. The parts to be glued 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. After a long storage period, the resin component should be stirred well before using.

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: 10/2011