

Basis	Polyurethane Casting Resin
Resin	MG 454 Comp. A (Polyole)
Hardener	MG 454 Comp. A (Isocyanate)
Colour	black

Applications

- Functional parts automotive field
- Functional parts EDP field
- Prototyping parts EDP field
- Prototypes in the automotive field
- Cladding parts automotive field
- Cladding parts EDP field

Properties

- good impact strength
- high rigidity
- glassfibre filled
- mechanical processable

Processing data

Product		Mixture MG 454 / Comp. A+B	Resin MG 454 Comp. A (Polyole)	Hardener MG 454 Comp. A (Isocyanate)
Colour		black	black	brown
Mixing ratio	p. b. w.		100	60
	volume		100	57
Viscosity at 25°C	mPas	n. a.	2400 ± 250	120 ± 20
Density at 20°C	g / cm ³	approx. 1,00 (dependent on curing conditions)	1,16 ± 0,02	1,22 ± 0,02
Pot life at 20°C	seconds	60 - 80	-	-
Curing time at 50° C	min.	5 - 15	-	-
Post curing	Time in h/ Temperature in °C	4 / 80 2 / 120	-	-

Physical data

Properties	Inspect. requirem.	Unit	Value
Flexural strength	EN ISO 178	MPa	57 ± 3
Flexural modulus	EN ISO 178	MPa	2100 ± 100
Flexural strength at breakage	EN ISO 178	%	6,3 ± 0,3
Impact resistance (Charpy)	EN ISO 179	kJ/m ²	11 ± 2
Heat resistance (HDT)	DIN EN ISO 75 B	°C	95 ± 5
Glass transition temperature TG	methode DSC	°C	107
Shore hardness	DIN 53505	Shore D	77 ± 2
Coefficient of linear expansion	DIN 53752	10 ⁻⁶ K ⁻¹	ca. 95

Sales units (packages)

Units	Comp. A	MG 454 Comp. A (Polyole)	20 kg / 200 kg
	Comp. B	MG 454 Comp. A (Isocyanate)	12 kg / 250 kg

Processing instructions

It is essential to stir component A before use, as the additives tend to sedimentation. Component B has not to be stirred.

The moulding tools should be made of a polyurethane- resp. epoxy resin system, with a high-quality surface.

In order to improve the surface appearance of the component, it is possible (but no must to do!):

- to preheat the material to 30 °C
- to preheat the moulds to 40 - 50 °C

A combination of preheated material and moulds is the optimum.

The wall thicknesses of the components are approx. 5 mm. Ribs or bigger material accumulations can also be produced.

The shrinkage is calculated with:

0,75 % (500 x 40 x 10 mm)

The components can be demoulded after approx. 10 min. This can differ accordingly to wall thickness and temperature.

The postcuring has to be made by means of a supporting structure.

In General

ebalta MG 454 is processed on a two-component low pressure device.

After grinding with a sand paper , grit 280, the surface can be varnished with a commercial lacquer. For better adhesion we recommend the use of a primer coat.

Release agent – please see category release agent

Storing

Storage at room temperature 18-25 °C.

Already opened containers should be closed immediately after use and should be used as soon as possible.

Information about the expiration date you find on the sales packages.

Safety measure

Please follow the precaution instructions of the Government Safety Organisation of the chemical industry when working with this material. Please follow safety advices !

Waste Disposal

According to arrangement with local authorities cured material can be disposed as domestic or commercial waste.

Non-cured products are waste which is subject to inspection and has to be disposed accordingly.

In case of further questions please do not hesitate to contact our Department for Product Safety.

The instructions and recommendations are given in good faith and are based on long experience and careful tests. Since the conditions of use are beyond our control, and due to versatility of applications and working methods, we can't give any guarantee. All information are non-binding and are no guarantee for special characteristics or properties of the product. Despite information given from **ebalta** the customer has to make his own tests regarding applications and processing. If any special warranty is requested, written agreement on this subject is essential.

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