

Basis	RIM polyurethane casting system
Resin	MG 400 Comp. A (polyol)
Hardener	PUR 19 Comp. B (isocyanate)
Colour	black
Further colours	beige

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

- semi-rigid
- very low E-modulus
- high impact strength
- very good stability against mech. influence (vibrations)
- well workable

Processing data

Product		Mixture MG 400 / PUR 19	Resin MG 400 Comp. A (polyol)	Hardener PUR 19 Comp. B (isocyanate)
Colour		black	black	brown
Mixing ratio	p. b. w.		100	80
	volume		100	69
Viscosity at 25°C	mPas	750 ± 100	950 ± 100	475 ± 100
Density at 20°C	g / cm ³	1,15 ± 0,02	1,05 ± 0,02	1,22 ± 0,02
Pot life at 20°C	seconds	50 - 60	-	-
Curing time at RT	min.	20 - 30	-	-
Post curing	Time in h/ Temperature in °C	4 - 5 / 60	-	-

Physical data

Properties	Inspect. requirem.	Unit	Value
Flexural strength	EN ISO 178	MPa	28 ± 2
Flexural elongation at break	EN ISO 178	%	7,6 ± 0,3
Flexural modulus	EN ISO 178	MPa	630 ± 40
Tensile strength	EN ISO 527-1	MPa	-
Impact resistance (Charpy)	EN ISO 179	kJ/m ²	no break
Glass transition temperature TG	method DSC	°C	ca. 65
Shore hardness	DIN ISO 7619-1	Shore D	74 ± 2

Sales units (packages)

Units	Comp. A	MG 400 Comp. A (polyol)	5,000 kg / 20,000 kg
	Comp. B	PUR 19 Comp. B (isocyanate)	5,000 kg / 20,000 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:

-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. 4 mm. Ribs or bigger material accumulations can also be produced.

The shrinkage is 0,45 %. Shrinkage varies slightly depending on geometry.

The components can be demoulded after approx. 20 - 30 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 400 is processed on a two-component low pressure device.

The systems MG 400 / MG 425 / MG 475 are cured with the hardener PUR 19.

By mixing MG 400 with MG 425 the E-modulus can vary between 630 – 1550 MPa.

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. Nitrocellulose lacquers have a better adhesion on polyurethane surfaces than on acrylic-lacquer-systems.

Release agent – please see category release agent

Storing

Storage at room temperature 18-25 °C.

Opened containers should be closed immediately after use and should be used up as soon as possible.

Shelf life is indicated on the labels.

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.