

Basis	prototyping casting resin
Resin	MG 815 Comp. A (isocyanat)
Hardener	MG 815 FR Comp. B (polyol)
Colour	black

Applications

- High quality parts, flame retardant

Properties

- flame retardant variation according UL 94 V0
- Klassifikation DIN EN 45545-2: 2013-08 Class R24 HL2
- high heat resistance
- long potlife
- RoHS conform

Processing data

Product		Mixture MG 815 / MG 815 FR	Resin MG 815 Comp. A (isocyanat)	Hardener MG 815 FR Comp. B (polyol)
Colour		black	colourless	black
Mixing ratio	p. b. w.		100	120
Viscosity at 25°C	mPas	-	290 ± 25	3000 ± 500
Density at 20°C	g / cm ³	1,33 ± 0,03	1,14 ± 0,02	1,40 ± 0,03
Pot life 200 g / 20°C	min.	5 - 7	-	-
Curing time at 70° C	min.	40 - 60	-	-
Post curing	Time in h/ Temperature in °C	2 / 100	-	-

Physical data

Properties	Inspect. requirem.	Unit	Value
Flexural strength	EN ISO 178	MPa	70 ± 5
Flexural elongation at break	EN ISO 178	%	4,5 ± 0,3
Flexural modulus	EN ISO 178	MPa	2770 ± 250
Tensile strength	EN ISO 527-1	MPa	46 ± 4
Elongation of tensile strength	EN ISO 527-1	%	9,7 ± 0,5
Impact resistance (Charpy)	EN ISO 179	kJ/m ²	18 ± 3
Heat resistance (HDT)	DIN EN ISO 75 B	°C	120 ± 3
Glass transition temperature TG	TMA	°C	122
Shore hardness	DIN ISO 7619-1	Shore D	83 ± 3
Flammability	according UL 94	coating thickness 4 mm	V0
Linear shrinkage	internal	%	approx. 0,3

Sales units (packages)

Units	Comp. A	MG 815 Comp. A (isocyanat)	1,000 kg
	Comp. B	MG 815 FR Comp. B (polyol)	1,200 kg

Processing instructions

MG 815 comp. A is an isocyanate.

MG 815 FR comp B is the adequate polyole.

Since the additives tend to sedimentation, stir up comp.B before use.

MG 815 FR comp.B contains fillers, which to a certain extent and temperature-dependent tend to sedimentation. Therefore before any mixing careful stirring up is essential.

Processing parameters: resin temperature 20-30°C / mould temperature 70°C.
Parts can be demoulded after about 40 - 60 min.

If required, supporting of the parts during postcuring.

In order to get bubble-free parts, we recommend working under vacuum.
Straight before casting, we recommend a one-time air impact of 60-70 mbar.

Mouldmaterial: we recommend silicone **Silastic®** RTV 4234-T4

In General

This product is a filled prototype casting compound on polyurethane base and is flame retardant according to UL 94 V-0 and classification DIN EN 45545-2: 2013-08 class R24 HL2

Processing preferentially in standard vacuum casting plants.

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.