

Basis **heat resistant tool gel coat**
 Resin **GH 781**
 Hardener

 Colour **grey**
 Further hardeners **GH 781 S / HRS**

Applications

- PU-foaming tools
- Heatable foundry patterns

Properties

- heat resistant
- high strength
- low thermal expansion

Processing data

Product		Mixture GH 781 / resin+hardener	Resin GH 781	Hardener
Colour		grey	grey	yellow
Mixing ratio	p. b. w.		100	5
Viscosity at 25°C	mPas	13000 ± 2500	60000 ± 5000	25 ± 5
Density at 20°C	g / cm ³	2,7 ± 0,1	2,9 ± 0,1	0,95 ± 0,02
Pot life 1000 g / 20°C	min.	110 - 130	-	-
Curing time at RT	hrs.	18 - 24	-	-
Post curing	Time in h/ Temperature in °C	-	-	-

Physical data

Properties	Inspect. requirem.	Unit	Value
Flexural strength	EN ISO 178	MPa	90 ± 10
Flexural strength at breakage	EN ISO 178	%	1,1 ± 0,2
Flexural modulus	EN ISO 178	MPa	11300 ± 1500
Impact resistance (Charpy)	EN ISO 179	kJ/m ²	7 ± 1
Compressive strength	EN ISO 604	MPa	145 ± 10
Heat resistance (HDT)	DIN EN ISO 75 B	°C	133 ± 5
Glass transition temperature TG	methode DSC	°C	-
Shore hardness	DIN 53505	Shore D	90 ± 3
Coefficient of linear expansion	DIN 53752	10 ⁻⁶ K ⁻¹	35 - 40
Dielectric strength E _D	DIN 53481	KV/mm	-
Linear shrinkage	internal	%	ca. 0,05

Sales units (packages)

Units Resin GH 781 10,000 kg

Processing instructions

The temperature of material and processing should be between 18 and 25° C.

Filled systems should be stirred thoroughly before use.

After each use the containers have to be closed again.

Porous mould surfaces should be sealed before (**ebalta** sealant).

For an optimum mould release we recommend a suitable release agent (e.g. T 1-1) which can be easily applied with a brush.

The mould should be treated 2 or 3 times with release agent and allowed to evaporate for approx. 20 min after every application.

Mixing ratio resin/hardener according to instructions!

To get a clean component part, we recommend upward flow casting and to take care of sufficient venting.

Resin residues at stirring rods and so on can be easily cleaned with our cleaning agent.

In General

ebalta GH 781 is a heat resistant two components epoxy resin with very low thermal expansion and high mechanical strength.

ebalta GH 781 is suitable for casting on a casted aluminium carrier part (sanded surface).

With casting thickness from 10-20 mm you get a good thermally conductive and high quality tool surface.

With hardener GH 781 S better curing and therefore shorter curing time.

For modifications, repairs and sealing we have a putty system available. With hardener HRS layers of 5-6 mm can be achieved.

Mixing ratio: GH 781/HRS: 100 : 9

The maximum thermal endurance is achieved by thermal treatment at 80°C for 12-16 hrs. directly after room temperature curing.

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.

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