



OBO-bond Adhesive EP 35

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Applications

Bonding of

- RenShape® BM 5050, BM 5055 and BM 5060
- obomodulan® 652 HT
- obomodulan® 1550 grey
- obomodulan® 1600 grey

Properties

- very high heat resistance
- fast curing

OBO-bond EP 35 is an epoxy resin system for use at temperatures up to 150 ° C.

Processing data

Product	Mixture OBO-bond EP 35	Resin Component A	Hardener Component B
Colour	yellowish transparent	yellowish transparent	yellowish transparent
Mixing ratio in parts by weight		100	14
Viscosity at 25°C in mPas	1800 ± 200	3800 ± 350	70 ± 15
Density at 20°C in g / cm³	1,13 ± 0,03	1,15 ± 0,03	0,99 ± 0,03
Pot life 150 g / 20 °C in min.	30 – 35	-	-
Curing time at RT in hours	16	-	-

Physical data

Flexural strength (EN ISO 178) in MPa	115 ± 15
Flexural modulus (EN ISO 178) in MPa	3275 ± 325
Tensile strength (EN ISO 527-1) in MPa	85 ± 10
Tensile modulus (EN ISO 527-1) in MPa	3215 ± 300
Elongation of tensile strength (EN ISO 527-1) in %	3,7 ± 0,2
Compressive strength (EN ISO 604) in MPa	125 ± 15
Heat resistance (HDT) (DIN EN ISO 75 B) in °C	150 ± 5
Glass transition temperature TG (method DSC) in °C	ca. 154
Shore hardness (DIN ISO 7619-1) Shore D	88 ± 3

Sales kit (packages)

article number	material	kg / unit
LZ VA000005	OBO-bond EP 35 Comp. A	0,87 kg
LZ VB000004	OBO-bond EP 35 Comp. B	0,12 kg



Epoxy resin systems with high temperature resistance also require higher temperatures during tempering, so that resin and hardener develop their physical and temperature-resistant properties in the best possible way, and the tool also has the desired physical properties.

Temper process

OBO-bond EP 35 cures at room temperature. To achieve best physical properties and temperature resistance epoxy resin systems require postcuring, we recommend at least 10 hours at 80°C.

8h at room temperature + 8h 80 °C	108 °C HDT B
8h at room temperature + 8h 80 °C + 8h 100 °C	123 °C HDT B
8h at room temperature + 8h 80 °C + 8h 120 °C	141 °C HDT B
8h at room temperature + 8h 80 °C + 8h 140 °C	ca. 155 °C HDT B

Heat up and cool down the block at a rate of 5°C/ hour. After cooling down leave the block in the closed autoclave so he reaches room temperature also in the core. Depending on the geometry of the block different processing parameters may be used.

Processing

Mix components A and B together carefully. Then apply the adhesive immediately. To apply the glue, it is best to use a toothed spatula with toothing A 2. The consumption per m² is approx. 600 g. Always use clean and dry tools for mixing and application. Please mix only as much adhesive as you can use directly. Residuals should be avoided as the adhesive gets very hot. Plastic cups in which the adhesive was mixed could melt. Spread the resulting residues out and let the glue harden.

Storage

Store the adhesive in tempered rooms at approx. 18 - 25 °C. Already opened containers should be closed immediately after use and should be used as soon as possible.

Handling Precautions

Our products are generally quite easy to handle provided that certain precautions normally taken when handling chemicals are observed. The uncured materials must not, for instance, be allowed to come into contact with foodstuffs or food utensils, and measures should be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected.

The wearing of impervious rubber or plastic gloves will normally be necessary; likewise the use of eye protection. The skin should be thoroughly cleansed at the end of each working period by washing with soap and warm water. The use of solvents is to be avoided. Disposable paper - not cloth towels - should be used to dry the skin.

Adequate ventilation of the working area is recommended.

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.

All information about the material and the working and processing are made to the best of our knowledge and are not to be regarded as an assurance of the properties of the material. Our information does not relieve the customer of their own suitability test for applications and procedures.