

## OBO-bond EP 35 – epoxy resin system for use at temperatures up to 150 °C

| Applications                                                                                                                                       | Properties                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| glue for the obomodulan® types: <ul style="list-style-type: none"> <li>• 652 HT terracotta</li> <li>• 1550 grey</li> <li>• EP 5060 blue</li> </ul> | <ul style="list-style-type: none"> <li>• fast curing</li> <li>• very high heat resistance</li> </ul> |

| Processing data                       |                           |                       |                         |
|---------------------------------------|---------------------------|-----------------------|-------------------------|
| Product                               | Mixture<br>OBO-bond beige | Resin<br>Component A  | Hardener<br>Component B |
| Colour                                | yellowish/transparent     | yellowish/transparent | yellowish/transparent   |
| Mixing ratio in parts by weight       | -                         | 100                   | 14                      |
| Viscosity at 25 °C in MPa             | 1800 ± 200                | 3800 ± 350            | 70 ± 15                 |
| Density at 20 °C in g/cm <sup>3</sup> | 1,13 ± 0,03               | 1,15 ± 0,03           | 0,99 ± 0,03             |
| Pot life 150 g/20 °C                  | 30 - 35 minutes           | -                     | -                       |
| Curing time at room temperature       | 16 hours                  | -                     | -                       |

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

| packing unit                                                                        |                                                                                                                                                                                              |                            |              |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------|
|                                                                                     | article number                                                                                                                                                                               | material                   | packing unit |
|  | LZ V A000005                                                                                                                                                                                 | OBO-bond EP 35 component A | 0,87 kg      |
|  | LZ V B000004                                                                                                                                                                                 | OBO-bond EP 35 component B | 0,12 kg      |
| Storage                                                                             | Store the OBO-bond adhesive in temperature-controlled rooms at approx. 18 to 25 °C. Already opened containers should be closed immediately after use and should be used as soon as possible. |                            |              |

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Geschäftsführer: Swen Graf

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|--------------|-----------------------------------------------|--------------|-----------------------------------------------|--------------|-----------------------------------------------|------------------|
| <p><b>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.</b></p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                   |              |                                               |              |                                               |              |                                               |                  |
| <p><b>Temper process</b></p>                                                                                                                                                                                                                                                                  | <p>OBO-bond EP 35 cures at room temperature. To achieve best physical properties and temperature resistance epoxy resin systems require post-curing, we recommend at least 10 hours at 80 °C.</p> <table> <tr> <td>8h at room temperature + 8h 80 °C</td><td>108 °C HDT B</td></tr> <tr> <td>8h at room temperature + 8h 80 °C + 8h 100 °C</td><td>123 °C HDT B</td></tr> <tr> <td>8h at room temperature + 8h 80 °C + 8h 120 °C</td><td>141 °C HDT B</td></tr> <tr> <td>8h at room temperature + 8h 80 °C + 8h 140 °C</td><td>ca. 155 °C HDT B</td></tr> </table> <p>Heat up and cool down the block at rate of 5 °C/hour. After cooling down leave the block in the closed autoclave so it reaches room temperature also in the core. Depending on the geometry of the block different processing parameters may be used.</p> | 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 |
| 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                   |              |                                               |              |                                               |              |                                               |                  |
| <p><b>Processing</b></p>                                                                                                                                                                                                                                                                      | <p>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 A2. The consumption per m<sup>2</sup> is approx. 600 g.</p>  <p>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.</p>                                                                                                                                                                                                              |                                   |              |                                               |              |                                               |              |                                               |                  |

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|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Working and safety recommendations</b> | Our products can be processed without risk, provided that the usual precautions for handling chemicals are observed. The uncured materials must not come into contact with foodstuffs or food utensils. Measures should be taken to prevent the uncured materials from coming in contact with the skin in order to avoid allergic reactions. It is strongly recommended to wear impermeable rubber or plastic gloves and safety glasses. After each operation, hands must be washed thoroughly with water and soap. The use of solvents should be avoided. Then disposable paper towels – no textiles – should be used to dry the skin. The working area should be well ventilated. |
| <b>Waste disposal</b>                     | According to arrangement with local authorities cured material can be disposed as domestic or commercial waste. Uncured material must be disposed of properly after consultation with the responsible waste management company.                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Legal notice</b>                       | All information about the material, the processing and machining are given without obligation to the best of our knowledge and are not to be taken as an assurance of the properties of the material or the processing and application possibilities in individual cases.<br>The user must check the product himself for its suitability for the intended application. In all other respects our terms of sale apply, which can be viewed and downloaded at any time from our homepage <a href="http://www.obo-werke.de">www.obo-werke.de</a> .                                                                                                                                     |



**We have the ideal adhesive for almost every board!**

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