TECHNICAL DATA SHEET

ergo.® 1320
consisting of ergo® 1318 resin + ergo® 1319 hardener

Product - Description
This low odor ergo® - grade is developed to bond metals like aluminum, steel, brass and its alloys as well as ferrite, a wide range of plastics and combinations of those materials. It is a two-component system and cures after mixing into a dry, high-strength and impact resisting polymer film. The best mixture-ratio is 1:1 (volume) and is obtainable without problems by using the common double-cartridges.

Advantages
- Fast curing system
- High tensile shear strength
- Resists against impacts as well as again peeling
- High flexibility
- Good gap-filling behavior up to 0,20mm
- Free of solvents
- Short fixture times

Physical Properties (liquid product)

<table>
<thead>
<tr>
<th>Chemical base</th>
<th>modified acrylic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>Cone/plate-system, cone C-50, D=35s⁻¹</td>
<td>3.000 – 5.000 mPa•s</td>
</tr>
<tr>
<td>Density</td>
<td>1.02 – 1.08 g/cm³</td>
</tr>
</tbody>
</table>
| Colour  
  resin ergo® 1318    | between white and beige |
|  hardener ergo® 1319   | black |
| Shelf life             | 6 month at ≤ 25°C |

Cured product after 24 hours @ 23°C:

<table>
<thead>
<tr>
<th>Tensile strength (DIN 53504 S2)</th>
<th>~ 21 N/mm²</th>
</tr>
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<tbody>
<tr>
<td>Elongation at break (DIN 53504 S2)</td>
<td>&gt; 20 %</td>
</tr>
</tbody>
</table>
tensile shear strength acc. to DIN EN 1465, parts only degreased

- aluminum : > 20 N/mm²
- steel : > 22 N/mm²
- at 100°C : ~ 6 N/mm²
- brass : > 17 N/mm²
- ABS : > 6 N/mm² (stripe failed)
- PS : > 2.5 N/mm² (stripe failed)

Shore D – hardness : ~ 65

Thermal range : -40°C up to +130°C

Resistance against solvents : good

Curing

Curing system : 2-component-system
ratio 1:1 (volume)

Potlife : 2 - 3 minutes (2g-mixture)

Initial strength (3 N/mm²) : 5 - 6 minutes at 23°C
Final strength : ~ 12 hours at 23°C

How to use the product

Resin and hardener normally is applied by using the double-cartridge-system with static mixture tube. ATTENTION: Potlife in the tube will be, depending on room-temperature, between 2 - 3 minutes. Apply the mixed glue on one part and spread it carefully over the whole bonding area. Fit the parts together and fix them at least as long as mentioned potlife time, better 6 minutes. The product may be used also in bead on bead manner.

In this case, cure speed and final strength will be on a slightly lower level and has to be checked by the customer in his real application.

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