



105 Epoxy Resin® / 206 Slow Hardener®

Technical Data Sheet

105 System 105/206

General description

105/206 Epoxy is used for general coating and bonding applications when extended working and cure time are needed or to provide adequate working time at higher temperatures.

105/206 forms a high-strength, moisture-resistant solid with excellent bonding and barrier coating properties. It will wet out and bond to wood fiber, fiberglass, reinforcing fabrics, foam and other composite materials, and a variety of metals.

105/206 Epoxy can be thickened with WEST SYSTEM fillers to bridge gaps and fill voids and can be sanded and shaped when cured. With roller applications, it has excellent thin-film characteristics, allowing it to flow out and self-level without “fish-eyeing.” Multiple coats of 105/206 Epoxy create a superior moisture barrier and a tough, stable base for paints and varnishes. It is formulated without volatile solvents resulting in a very low VOC content. It has a relatively high flash point, no strong solvent odor and does not shrink after curing. It is not intended for clear coating natural finished wood.

Handling characteristics

| | | |
|---|-----------|---------------------------------|
| Mix ratio by volume (300 Mini Pump ratio) | · · · | 5 parts resin : 1 part hardener |
| by weight | · · · · · | 5.36 : 1 |
| Acceptable ratio range by weight | · · · · · | 4.83 : 1 to 6.01 : 1 |
| Mix viscosity (at 72°F) ASTM D-2393 | · · · · · | 725 cps |
| Pot life (100g at 72°F) | · · · · · | 20 to 25 minutes |
| Working time, thin film* | · · · · · | 90 to 110 minutes |
| Cure to a solid, thin film* | · · · · · | 10 to 15 hours |
| Cure to working strength | · · · · · | 1 to 4 days |
| Minimum recommended temperature | · · · · · | 60°F (16°C) |

**Epoxy cures faster at higher temperatures and in thicker applications.*

Physical properties of cured epoxy

| | | |
|--|-----------|------------|
| Specific gravity | · · · · · | 1.18 |
| Hardness (Shore D) ASTM D-2240 | · · · · · | 82 |
| Compression yield ASTM D-695 | · · · · · | 11,500 psi |
| Tensile strength ASTM D638 | · · · · · | 7,300 psi |
| Tensile elongation ASTM D-638 | · · · · · | 4.5% |
| Tensile modulus ASTM D-638 | · · · · · | 4.60E+05 |
| Flexural strength ASTM D-790 | · · · · · | 11,800 psi |
| Flexural modulus ASTM D-790 | · · · · · | 4.50E+05 |
| Heat deflection temperature ASTM D-648 | · · · · · | 123°F |
| Onset of Tg by DSC | · · · · · | 126°F |
| Ultimate Tg | · · · · · | 139°F |
| Annular shear fatigue @ 100,000 cycles | · · · · · | 10,100 lb |

Storage/Shelf life

Store at room temperature. Keep containers closed to prevent contamination. With proper storage, resin and hardeners should remain usable for many years. After a long storage, verify the metering accuracy of the pumps. Mix a small test batch to assure proper curing.

Over time, 105 Resin will thicken slightly and will therefore require extra care when mixing. Repeated freeze/thaw cycles during storage may cause crystallization of 105 Resin. Warm resin to 125°F and stir to dissolve crystals. Hardener may darken with age, but physical properties are not affected by color. Be aware of a possible color shift if very old and new hardener are used on the same project.

Manufactured for
WEST SYSTEM by:



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