



TECHNICAL DATASHEET

WEST SYSTEM 205 Fast Hardener / 105 Epoxy Resin

General Description

West System 105/205 Epoxy is used for general coating and bonding applications at lower temperatures and to produce a rapid cure that develops its physical properties quickly at room temperature.

West System 105/205 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.

West System 105/205 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 105/205 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 odour and does not shrink after curing. It is not intended for clear coating natural finished wood.

Mix Ratio

Mix ratio by volume	5 parts resin : 1 part hardener
Mix Ratio by weight	5:1
Mix viscosity (at 20°C) ASTM D-2393	975 cps
Pot life (100g at 20°C)	9 to 12 minutes
Working time, thin film* (20°C)	60 to 70 minutes
Cure to a solid, thin film* (20°C)	6 to 8 hours
Cure to working strength (20°C)	1 to 4 days
Minimum recommended temperature	4°C
*Epoxy cures faster at higher temperatures and in thicker applications.	

Cured Physical Properties

Specific gravity - mixed	1.10
Hardness (Shore D) ASTM D-2240	96
Compression yield ASTM D-695	11,400 psi
Tensile strength ASTM D638	7,900 psi
Tensile elongation ASTM D-638	3.40%
Tensile modulus ASTM D-6	4.08E + 05 psi
Flexural strength ASTM D-790	14,100 psi
Flexural modulus ASTM D-790	4.60E + 05 psi
HDT after 7 days @ 20°C	52°C
Ultimate Tg (12hrs @ 60°C)	68°C

Storage

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 50°C and stir to dissolve crystals. Hardener may darken with age, but physical properties are not affected by colour. Be aware of a possible colour shift if very old and new hardener are used on the same project.

Health & Safety

Adhesive Technologies NZ Ltd provides its customers with a product specific Material Safety Data Sheet (MSDS) to cover potential health effects, safe handling, storage, use and disposal information.

Direct skin contact should be avoided, all amines they have a moderate sensitising potential and should be considered mild skin corrosives. ADR248 system should not be ingested; in an unlikely event ADR248 is ingested see your nearest physician immediately.

Use with good ventilation and adequate safety equipment including gloves.

- If skin contact occurs, wash with lanolin-based hand-cleaner and water.
- If eye contact occurs, immediately wash for 15 minutes with running water.

• **If swallowed:**

Resins - DO NOT induce vomiting, and contact a doctor or the Poisons Information Centre.

Hardeners – DO NOT induce vomiting, give plenty of milk or water and contact a doctor or Poisons Information Centre.

Note: Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty, express or implied, including any warranty or merchantability or fitness, nor is protection from law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials and in no event shall we be liable for special or consequential damages.