Huntington Specialty Materials

HS-752 "Polysilazane Matrix" High Performance Resin System

HS-752 High Performance composite Resin is a 2 part 100% solids, Low Temperature Cure Resin System with High Temperature Performance.

Mix ratio:

Part A – **100 parts by weight** (Clear liquid resin)
Part B – **160 parts by weight** (Amber color liquid)
This mix ratio is critical to maintain the physical properties of the resin system.
Stir mix parts A & B together to thoroughly blend the components, before using.
Use Low to medium mixing rpm equipment when blending the resin system.
As a High Speed/Shear mixer forces may generate excessive air entrapment & heat build-up (exothermic) and shorten pot life, especially in larger mix batches. Resin bath

Mixed Pot Life:

should be kept at 75°F to 85°F.

8 hrs at 77°F (25°C) =1,560 cps 24 hrs at 77°F (25°C) = 5,000 cps Higher temperatures will shorten the pot life. If the pot life needs to be extended; The mixed resin can be stored under refrigeration in a sealed container. Allow the resin to warm up to before using, after being refrigerated, to help prevent any condensation accumulation, (dependent of Relative Humidity). **Cleanup** of tools or other surfaces can be accomplished with MEK or other similar solvents.



General Specs & Cure details:

- Viscosity;
 - A. 1500-2000 cps
 - B. 350-450 cps
 - C. 780 combined @ 77°F
- > Epoxy Equivalent Weight;
 - B. 131-143
- > Anhydride Molecular Weight;
 - A. 235-245
- ➢ Gel time;
 - @ 212°F / 23 minutes
 - @ 320°F / 90 seconds
- > **TG by DMA**; 245°C
- Heat Distortion: 210°C
- > Tensile Strength: 5868psi
- > Tensile Elongation: 2.7%
- > Tensile Modulus: 215,000 psi
- ➤ Fracture Toughness: 730psi-in^{1/2}

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