



Technical datasheet

A-Pox 900 / B-Cure 33SW

The system is a low viscosity solvent free 100 % reactive epoxy system tailor made for vacuum infusion of composite constructions etc. It is made from high quality BPA/F resins and low viscosity curing agent with good mechanical properties.

Wetting properties are excellent, with high penetration into cavities.

Good mechanical properties and excellent fatigue resistance, as well as high impact strength.

Mix-Ratio

System is very tolerant to mix-ratio. Any ratio between 100:32 up to 100:36 can be used safely but we recommend a nominal of 100:34.

A larger amount of B-Cure 33SW will increase cure speed, lower Tg and increase elongation to break. A reduction will have the opposite effect.

Epoxy resin

| | |
|-----------|-------------------------------------|
| EGC | 4700 – 5300 mmol/kg |
| Viscosity | 900 – 1400 mPas |
| Density | 1,12 – 1,16 kg/l |
| Colour | Clear/slightly yellow (Gardner < 3) |

Curing agent

| | |
|-----------|----------------------|
| AHEW | 52-57 |
| Viscosity | 5-20 mPas |
| Density | 0,9 – 1,0 kg/l |
| Colour | Clear (Gardner < 1) |

Mixed resin properties

| | |
|---------------------|---------------------|
| Density mixed | 1,04 kg/l |
| Colour | clear (Gardner < 2) |
| Gel-time 25C (150g) | 250-350 min |
| Gel-time 60C (150g) | 30-45 min |
| Minimum cure temp. | 15 C. |



Viscosity profile

Mix viscosity 25degr.C 180-270 mPas

Cured resin properties

Tg. max obtainable 95 degr.C (cured 10h 110degr.C)
Tg measured by DSC 23-175 C, cooling followed by 23-175 C

| Mix-ratio | Tg. onset | Tg.midpoint |
|-----------|-----------|-------------|
| 100:31 | 67 | 70 |
| 100:33 | 73 | 75 |
| 100:35 | 75 | 77 |
| 100:37 | 71 | 73 |

Neat Resin mechanical properties – cure cycle 10h at 65degr.C

| | |
|------------------------|---------|
| Tensile modulus, MPa | 30-3400 |
| % Elongation at break | 5-7 |
| Flexural strength, MPa | 95-105 |

All values are given as result of specific tests, and expected to be representative. We can however not be hold liable for errors that can occur, and do advice costumers to carry out tests for any comparison or calculating matter.