ISOBOND SR 5700 / SD 5703

Epoxy adhesive system

2 component epoxy adhesive for resilient bonds
Thixotropic gel can be applied in high thicknesses
Ambient temperature curing
Low coloured, compatible with translucid substrates

Substrates :

Wood : ultra strong bonding with all woods, including high density woods (d > 0.7)
Structural adhesion on wet or dry wood; wood on wood, wood on laminate…
Surface preparation : Please ask for our advice.

Physical properties

		Resin SR 5700	Hardener SD 5703
Density Picnometer ISO 2811-1	at 20 °C	1.16 ± 0.01	0.96 ± 0.01
Viscosity (cps) Rheometer CP 50 mm Shear rate 10 s^{-1}	at 15 °C	334 000 ± 70 000	2 480 ± 500
	at 20 °C	158 000 ± 32 000	1 850 ± 400
	at 25 °C	96 000 ± 20 000	1 400± 300
	at 30 °C	67 000 ± 14 000	1 090 ± 200
	at 40 °C	43 000 ± 8 500	690 ± 150
Aspect		Translucid thixotropic gel	Pale yellow liquid
Weight ratio		100 g / 44 g	
Volume ratio		2 / 1	

Mix properties

		SR 5700 / SD 5703
Viscosity (cps) Rheometer PP 50 mm Shear rate 10 s^{-1}	at 20 °C	110 000 ± 20 000
	at 30 °C	100 000 ± 20 000
Time to reach 50 °C on a 100 g mix at 25 °C		Approximately 60 minutes
Glass transition Tg1 maximum		75 °C

Glass transition DSC : ISO 11357-2 : 1999 -5°C to 180°C under nitrogen gaz
Tg1 or Onset : 1st point at 20 °C/mn
Tg1 maximum or Onset : second passage

Tension shear strength for metal / metal bonds (ISO 4587)

- pre-treatment: sanding
- Curing cycle: 16 hours at 40 °C
- Test carried out at 23 °C

Aluminium :	27 N / mm²
Stainless steel V4A:	30 N / mm²
Copper :	26 N / mm²
Brass:	23 N / mm²
Steel 37/11 :	22 N / mm²
Galvanized steel:	17 N / mm²

Tension shear strength for plastic / plastic bonds (ISO 4587)

- pre-treatment: light abrasion and propanol degreasing
- Curing cycle: 16 hours at 40 °C
- Test carried out at 23 °C

Polycarbonate :	8 N / mm²
SMC :	7 N / mm²
ABS :	6 N / mm²
Plexiglass:	4 N / mm²

Minimum Time / Temperature to reach a given shear strength resistance

Minimum curing time to reach a shear strength over 1 N / mm²

at 15 °C :	at 23 °C :	at 40 °C	at 60 °C	at 100 °C
12 hours	6 hours	80 min	25 min	5 min

Minimum curing time to reach a shear strength over 10 N / mm²

at 15 °C :	at 23 °C :	at 40 °C	at 60 °C	at 100 °C
16 hours	10 hours	2 hours	15 min	7 min

NB : The given shear strength resistance have been measured according to standard test methods. They are only a technical indication and should not be considered as a product specification.

Reactivity – 1mm film viscosity evolution