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 ± 0.01	@ 20 °C	1.16	0.96
Viscosity mPa.s ± 20 %	@ 15 °C	334 000	2 480
	@ 20 °C	158 000	1 850
	@ 25 °C	96 000	1 400
	@ 30 °C	67 000	1 090
	@ 40 °C	43 000	690
Aspect		Translucid thixotropic gel	Pale yellow liquid

Mix properties SR 5700 / SD 5703

Weight ratio		100 g / 44 g
Volume ratio		2 / 1
Viscosity mPa.s ± 20 %	@ 20 °C	110 000
	@ 30 °C	100 000
Time to reach 50 °C on a 100 g mix	@ 25 °C	Approximately 60 minutes
Glass transition DSC Tg1 maximum		75 °C

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

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

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

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

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

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

Minimum Time / Temperature to reach a given shear strength resistance

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

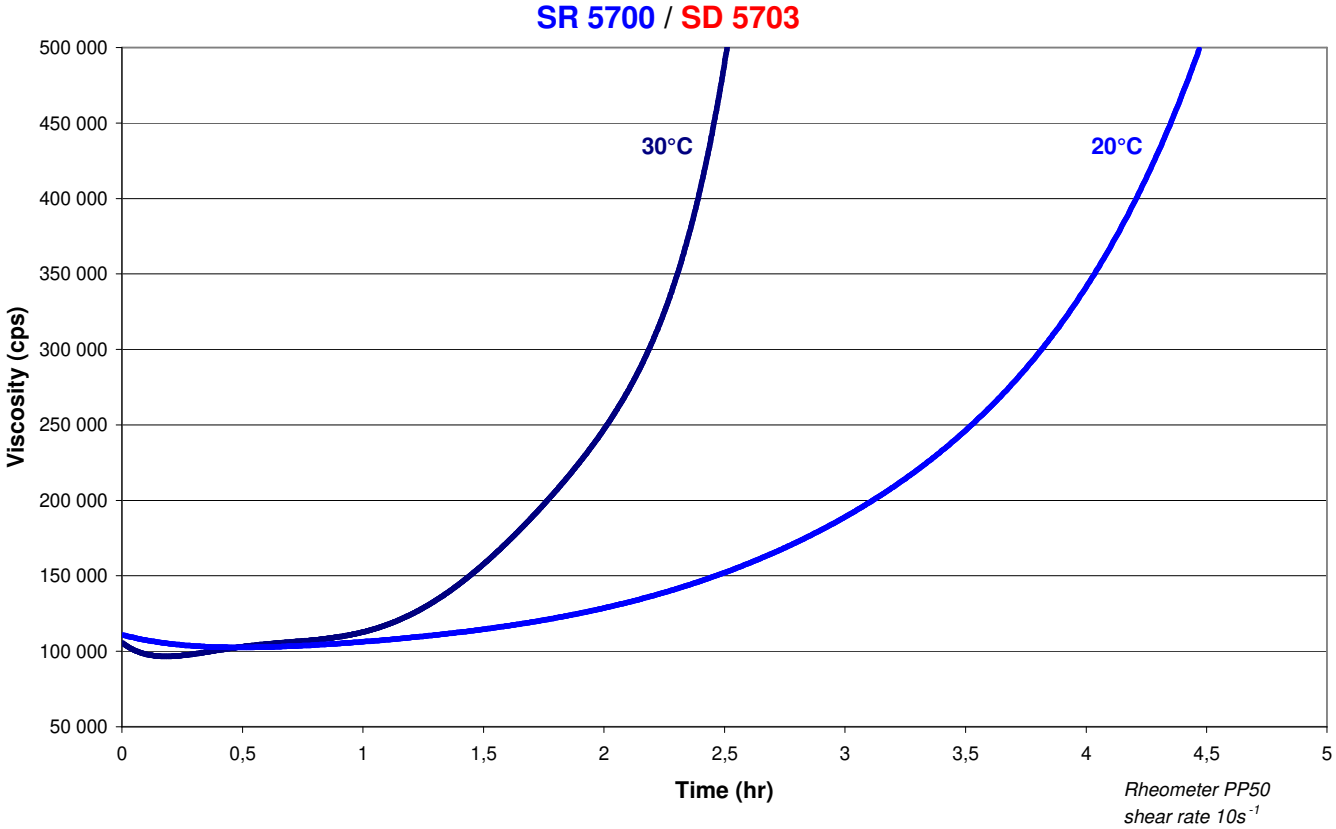
@ 15 °C :	@ 23 °C :	@ 40 °C	@ 60 °C	@ 100 °C
12 hours	6 hours	80 min	25 min	5 min

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

@ 15 °C :	@ 23 °C :	@ 40 °C	@ 60 °C	@ 100 °C
16 hours	10 hours	2 hours	45 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



Measures undertaken according to the following norms:

Compression	*NF EN ISO 844 (2009-10-01)*	*50 x 50 x 20 mm*
Flexion	*NF EN ISO 178*	*200 x 20 x 10 mm*
Shear Strength	*ASTM D732-93*	*50 x 50 x 10 mm*

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*
Glass transition DTMA:	*ISO 11357-1 - TG onset G'* *Temperature ramp 0 °C to 180 °C @ 2°C/min* *ASTM D4065 - TG peak G''*

Physical tests according standard ::

Gardner color:	*NF EN ISO 4630*	*Visual method*
Refractive index :	*NF ISO 280*	
Viscosity:	*NF EN ISO 3219*	*Rheometer 50 mm, shear 10s^{-1}*
Density:	*NF EN ISO 2811-1*	*Pycnometer → liquids*
Density	*NF EN ISO 845*	*→ solids*
Density	*Helium*	*→ solids*
Gel time :	*Cross G' G'' / rheometer CP50 - Shear rate 10 s^{-1}*	
GreenCarbon content:	*ASTM D6866 or XP CEN/TS 16640 Avril 2014*	

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If our responsibility should nevertheless be involved, it would be, for all the damages, limited to the value of the goods supplied by us and implement by the customer. We guaranty the non-reproachable quality of our products, in the general context of sales and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.