

# SR 8150 / SD 815 Bx

## Flexible epoxy systems

### Description

- 80 to 110 % of elongation at break in tension
- Shock resistance over 150 KJ / m<sup>2</sup>
- 4 hardeners available with different reactivities :25 mn to 5 hours of pot-life
  - SD 815 B 1:** Fast hardener, "rigid"
  - SD 815 B 2:** Standard, rigidity between **SD 815 B 1** and **SD 815 B 3**
  - SD 815 B 3:** Slow hardener, very low modulus
  - SD 815 B 4:** Ultra slow hardener
- Low viscosity of the mixes
- Unfilled and translucent
- Advantages compare to polyurethane:
  - Do not foam when in contact with humidity
  - Memory of shape

### Applications

- Parts under vibrations, shocks, low temperature
- Flexible laminates: Body parts for cars, motorbike, 4X4...
- Casting and inclusion (degassing under vacuum)
- Parts « design », prototypes

### Curing cycle

Minimum of 24 hours @ ambient temperature + 6 hours @ 40°C + 10 hours @ 60°C

### Mixing ratio

Systems	Mix by weight	Mix by volume
SR 8150 / SD 815 <b>B1</b> :	100 g / 16 g	100 ml / 18 ml
SR 8150 / SD 815 <b>B2</b> :	100 g / 19 g	100 ml / 21 ml
SR 8150 / SD 815 <b>B3</b> :	100 g / 26 g	100 ml / 29 ml
SR 8150 / SD 815 <b>B4</b> :	100 g / 26 g	100 ml / 29 ml

### Physical properties

	SR 8150	SD 815 B1	SD 815 B2	SD 815 B3
Aspect	Viscous liquid	Liquid	Liquid	Liquid
Colour	Yellow	Clear	Clear	Clear
Chemical nature	Epoxy resin	Hardener	Hardener	Hardener
Density @ 20°C (kg / l)	1.10	0.99	0.97	0.98
Viscosity @ 25°C (mPa.s)	2500-3000	12-18	7- 13	16- 21

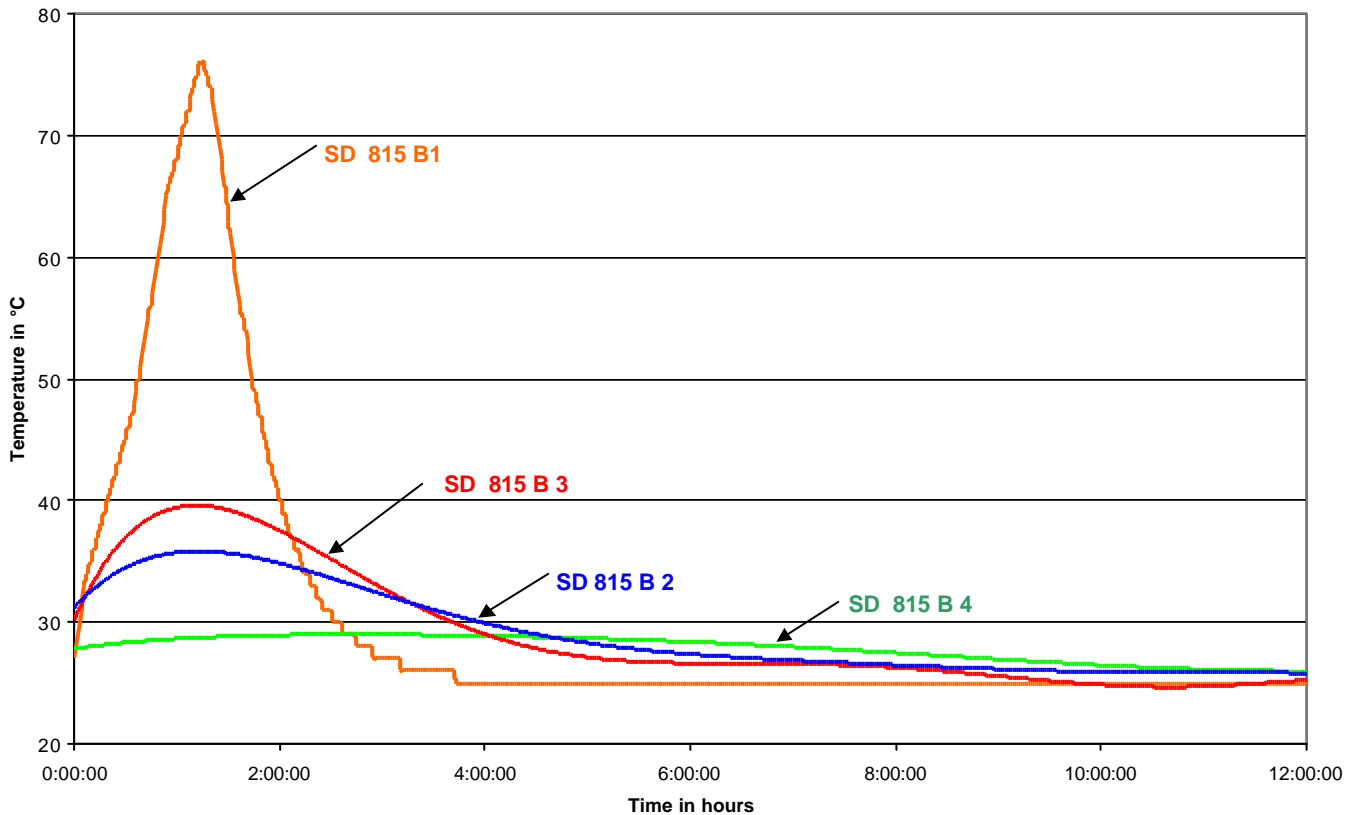
## Mechanical properties on cast resin

SR 8150 / SD ...		SD 815 B1	SD 815 B2	SD 815 B3	SD 815 B4
Curing cycle		24 h @ 25°C + 16 h @ 60°C	24 h @ 25°C + 16 h @ 60°C	24 h @ 25°C + 16 h @ 60°C	24 h @ 25°C + 16 h @ 60°C
<b>Tension</b>					
Modulus	N/mm <sup>2</sup>	149	9	3	10
Maximum resistance	N/mm <sup>2</sup>	23	12	4	10
Resistance at break	N/mm <sup>2</sup>	23	9	4	9
Elongation at max. resistance	%	83	109	95	100
Elongation at break	%	83	109	95	100
<b>Glass transition / DSC</b>					
Tg1	°C	18	14	6	17

Tests carried out on samples of pure cast resin, without prior degassing, between steel plates.  
Measures undertaken according to Afnor norms :

- Tension: NF T 51-034
- Glass transition: DSC  
Tg1: 1<sup>st</sup> point @ 10°C / mn

## Exothermal peak on 100g of mix of SR 8150 / SD 815 Bx @ 25 °C



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