



SR 1500 / SD 7837 Fast epoxy resin systems

SR 1500:

Epoxy matrix
Without classified Toxic products (T)
Crystallization free

Hardener :

SD 7837 : Fast hardener

Profile:

Cure at ambient temperature and post cure at 40 to 60 °C

Applications:

Small hand laminating, Adhesive, puty

Epoxy resin SR 1500 :

Appearance	Viscous liquid		
Chemical nature	Bisphénol A&F/ epichlorhydrine resin		
Storage	Can crystallize at low temperature or after a long storage. Shelf life : 2 years @ 18 – 25°C		
Color	Clear to yellow, Gardner < 3		
Density (Kg/l)	@ 20 °C	1.13 ± 0.05	Picnometer NF EN ISO 2811-1
Brookfield viscosity (m.Pas)	@ 25 °C	1300 ± 300	Mobil LV3 60 tr / mn ISO 2555

Hardener SD 7837 :

Aspect / color	SD 7837 Amber Liquid		
Reactivity levels	Fast		
Viscosity	@ 20 °C	1400-1800	Mobil LV2
	@ 25 °C	800-1200	60 tr / mn ISO 2555
Density (g/cm ³ ± 0.05)	@ 20 °C	1.05	Picnometer NF EN ISO 2811-1

SR 1500 / SD 7837 blends

Quantity by weight	100 g / 35 g
Quantity by volume	100 ml / 38 ml



Reactivity :

Time taken to reach 50 °C based on 150 g mix:	@ 25 °C	9'
	@ 30 °C	6'



500 microns dust free film :	@ 25 °C	1 h 15'
	@ 30 °C	1 h
Sandable after	@ 25 °C	2 h 30'
	@ 30 °C	2h

Toxicity guide (EEC Classification according Directive 67 / 548 / EEC) :


Products	Symbol		Risk phrases
SR 1500		Xi: Irritating N: Dangerous for the environment	R 36/38 R 51/53 R 43
SD 7837		T: Toxic	R 24/25 R 34 R 43

Before use, read the Safety data sheet of each components

Other :

SD 1119.10 : Development / experimental
Type : Ultra fast hardener for laminates and puty
Tg 1 maxi: Nearly 70 °C with 1500
Color: Better than SD 7837
Surface: Hight gloss

Mechanical properties of pure resin

Cure Schedule 		SR 1500 / SD 7837		
		14 days 23°C	24h 23°C + 24h 40°C	24h 23°C + 8h 60°C
Tensile				
Modulus of elasticity	N/mm ²	3090	2950	2970
Maximum resistance	N/mm ²	66	78	80
Resistance at break	N/mm ²	66	73	76
Elongation at max. resistance	%	2.5	4.3	4.7
Elongation at break	%	2.5	5.3	6.6
Flexion				
Modulus of elasticity	N/mm ²	3400	3320	3260
Maximum resistance	N/mm ²	115	121	122
Elongation at max. resistance	%	4.4	5.1	5.7
Elongation at break	%	5.3	8.2	8.1
Charpy impact strength				
Resilience	KJ/m ²	18	22	23
Glass Transition / DSC				
Tg 1	°C	50	68	77
Tg 1 max	°C			78

Tests carried out on samples of pure cast resin, without prior degassing, between steel plates.

Measures undertaken according to Afnor normes :

Tension: NF T 51-034

Flexion : NF T 51-001

Choc Charpy: NF T 51-035

Glass transition DSC : Tg1: 1st point @ 10°C / mn, Tg 1 max.: 2nd passage 180°C