

PRODUCT DATA SHEET

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FSE323L

LOW VISCOSITY, HIGH STRENGTH, IMPREGNATING ADHESIVE FOR CARBON FIBER FABRIC

SYSTEM

DESCRIPTION

FSE323L is used for impregnating carbon fibers and bonding carbon fiber fabric to concrete surfaces.

CHARACTERISTICS / ADVANTAGES

- Low viscosity, easy to impregnate large area weight fabric
- Easy to mix
- Moisture tolerant before, during, and after curing
- High strength and modulus adhesive
- Excellent adhesion to concrete, masonry, metals, wood, and most structural materials
- High creep resistance
- Abrasion and shock resistant
- Solvent-free and VOC-compliant
- High temperature resistance
- Long pot life and open time

APPROVALS / STANDARDS

• Complies with relevant international standards for carbon fiber strengthening systems.

PRODUCT INFORMATION

Color	component A: blue component B: light yellow mixed: light blue
Packaging	21kg (component A) and 7kg (component B) per kit.
Shelf Life	18 months in original, unopened packaging.
Storage	Store in a dry place and without direct sunlight at a
	temperature between 4°C and 32°C

TECHNICAL INFORMATION

Mix Ratio	A:B = 3:1 by weight
Service Temperature	-5 °C min. / + 40°C max.
Operable Time	50 minutes
Touch Dry Time (25°C)	4 hours



Curing Time (25°C)	7 days
Viscosity	<500mPa·s
Distortion Temperature	min. 65°C
Non-volatile Matter Content	min. 99.5 %
Tensile Strength (ASTM D638)	60Mpa
Tensile Elastic Modulus (ASTM D638)	3.1GPa
Elongation at Break (ASTM D638)	2.3%
Flexural Strength (ASTM D790)	81 MPa
Compressive strength	90MPa
Steel-steel Adhesive Tensile Strength	45 Mpa min.
Steel-steel Tensile Shear Strength	20 Mpa min.
Steel - steel T Impact stripping length	2mm max.
Pulling Bonding Strength along with Concrete	2.5 Mpa min.
Steel-concrete Tensile	C60 concrete damage
Consumption for 300GSM	0.7-0.9 kg/sqm
Consumption for 600GSM	1.0-1.2kg/sqm
Wet and Heat Ageing	shear strength decrease rate: 12% max.
Heat Aging Resistance	shear strength decrease rate: 5% max.
Freezing & Thawing	shear strength decrease rate: 5% max.
Fatigue Stress	2×10 ⁶ times continuous sine wave fatigue loads,
	no specimen destroys.
Stress Resistance	no steel - steel tensile shear specimens destroy,
	creep deformation value: 0.4 mm max
Salt Resistance	strength decrease rate: 5% max., no cracks or come
	unglued.
Alkaline Resistance	no strength decrease.
Acid Resistance	no cracks or degumming.

HEALTH & SAFETY INFORMATION

• Refer to the most recent Safety Data Sheet for safe handling, storage, and disposal of the product.

LEGAL NOTES

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