

PRODUCT DATA SHEET

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FSE322

HIGH MODULUS, HIGH STRENGTH, IMPREGNATING ADHESIVE FOR CARBON FIBER FABRIC

SYSTEM

DESCRIPTION

FSE322 is used for impregnating carbon fibers and bonding carbon fiber fabric to concrete surfaces.

CHARACTERISTICS / ADVANTAGES

- Long pot life and open time
- 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
- Compatible with FS Wrap System
- High creep resistance
- Abrasion and shock resistant
- Solvent-free and VOC-compliant
- High temperature resistance

APPROVALS / STANDARDS

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

PRODUCT INFORMATION

Color	Light yellow
Packaging	20kg (component A) and 10kg (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℃ and 32℃

TECHNICAL INFORMATION

Mix Ratio	A:B = 2:1 by weight
Service Temperature	-5 °C min. / + 40°C max.
Operable Time	70 minutes
Touch Dry Time (25°C)	1.5 hours
Curing Time (25°C)	7 days



Thixotropic Index	min. 3.0
Distortion Temperature	min. 65°C
Non-volatile Matter Content	min. 99.5 %
Nonvertical Mobility (25°C)	2.0 mm
Tensile Strength (ASTM D638)	60Mpa
Tensile Elastic Modulus (ASTM D638)	3.1GPa
Elongation at Break (ASTM D638)	2.4%
Flexural Strength (ASTM D790)	95 MPa
Steel-steel Adhesive Tensile Strength	40 Mpa
Steel-steel Tensile Shear Strength	19 Mpa
Steel - steel T Impact stripping length	0mm
Pulling Bonding Strength along with Concrete	5 Mpa
Steel-concrete Tensile	C60 concrete damage
Consumption for 300GSM	0.6-0.9 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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