



General Description

ALPHATEC® 800 is a high performance, aggregate-filled epoxy grout with superior mechanical and chemical properties. This grout material was specifically formulated to support heavy machinery on concrete foundations, and when used correctly, will ensure the transfer of static and dynamic loads into the inertia block. It is widely used in repair work, and for new installations, of diesel engines, reciprocating compressors, electric motors, pumps, blowers, fans, rolling mills, presses, turbines, and many other types of rotating machinery. ALPHATEC® 800 has a maximum working temperature limitation (measured at the contact surface) of 70°C.

Features

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|----------------------------|------------------------------|
| High physical properties | Negligible shrinkage on cure |
| Excellent creep resistance | Oil and chemical resistant |

Resin System Properties

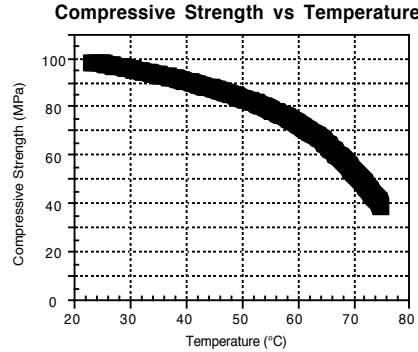
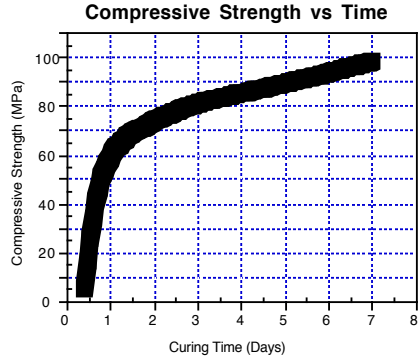
	Liquid	Hardener	Mixed
Viscosity at 25° C (mPa.s/cps):	1,200	140	650
Specific Gravity:	1.15	0.95	1.1
Mixing Ratio by weight:	100	43	
Mixing Ratio by volume:	100	50	
Pot Life in minutes at temp:	Time	Temp	
	35 mins	23°C	
Gel Time in minutes at temp:	80 mins	10°C	
	65 mins	23°C	
Working Time (resins only):	130 mins	10°C	
Working Time mixed with aggregate:	60 mins	23°C	
	90 mins	10°C	
Shrinkage on cure:	negligible		

Cured Properties

	SI Units	Metric	Imperial
	MPa (GPa)	kg/cm²	psi
Compressive strength (ASTM C579B):	100	1020	14,500
Compressive modulus (ASTM C579B):	(10.8)	110,000	1,564,000
Compressive strength (cured underwater):			
Flexural strength (ASTM C580):	26.1	265	3,700
Flexural modulus (ASTM C580):	(10.1)	103,000	1,465,000
Tensile bond strength (to steel):	19.3	197	2,800
Shear bond strength (to steel):	37.9	386	5,500
Slant shear bond strength to concrete:			
Tensile bond strength to primed concrete:			
Coefficient of linear expansion (ASTM C531):		0.000036 cm/cm/°C	0.00002 in/in/°F
Creep under load - 24 hrs:		0.0027 mm/mm	0.0027 in/in
1 year:		0.0038 mm/mm	0.0038 in/in
10 years:		0.0041 mm/mm	0.0041 in/in

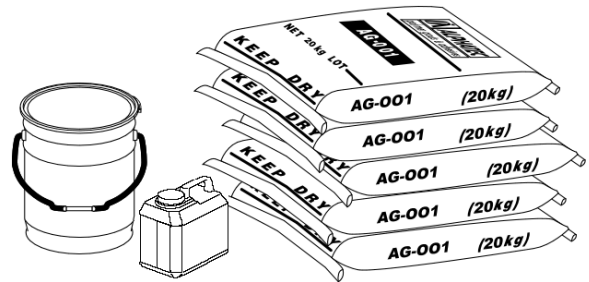
Creep testing is done with a constant load of 600 psi (4 MPa) @60°C

Pictorial Information 1



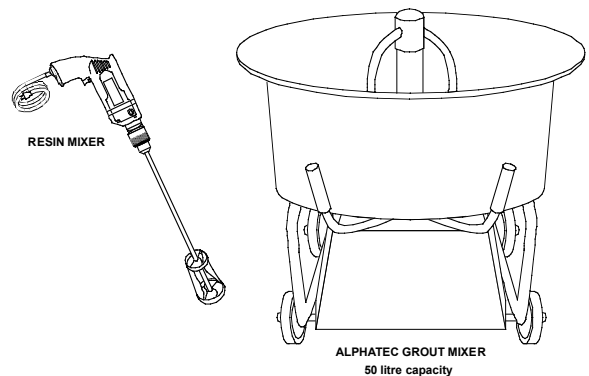
Packaging

ALPHATEC 800 is packed in a set yielding 50 litres. The components are pre-measured, and should normally be mixed as a unit. Aggregate volume can be adjusted to some extent to obtain optimum flowability at the jobsite, depending on ambient temperatures, and the depth of grout to be poured.



Mixing and Handling

Always use the full amount of hardener, and mix into the liquid portion for at least 2 minutes, using an air or electric powered resin mixer, with a non-aerating blade, such as the “Jiffy” blade illustrated at right. Pour one bag of aggregate into the mixer first, to seal the trapdoor, and then add the mixed resin. Add the remaining 4 bags of aggregate slowly and steadily, and continue mixing only until all the aggregate particles are coated with resin. **Do not overmix.** In general use the full amount of aggregate per set, unless low temperature conditions demand a slight reduction in the first mix, or slightly more in high temperatures. See “General Instructions for the Use & Handling of Polymer Grouts” for further information.



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In the interests of continually upgrading and improving our products, Alphatec Holdings reserves the right to change these specifications without notice.