Heat Transfer Compounds product selection chart

Steam Heating



	Heat transfer cement						
Product	Standard T-3	T-63	T-80	T-85	T-802	NH Nonhardeming	SnapTrace*
Standard Use	Provide an efficient thermal connection between tracer and process equipment for high temperature maintenance or high exposure temperatures. Also used with ChannelTrace system featuring TFK galvanized steel channel.		Suitable for use in areas of extreme moisture and/or corrosive environments with low to medium exposure temperatures. These products are particularly suited for valves and similar equipment.		Self-curing - no heat required. Suitable for use in areas of extreme moisture and/or corrosive environments.	Used where periodic disassembly is necessary or for plate-type heating coils.	Preformed compound designed for rapid, consistent installation under TFK channel on straight runs of piping.
Maximum Exposure Temperature	700°F (371°C)	1,250°F (677°C)	325°F (163°C)	375°F (190°C)	275°F (135°C)	375°F (190°C)	406°F (208°C)
Minimum Exposure Temperature	-320°F (-196°C)		-320°F (-196°C)		-320°F (-196°C)	-320°F (-196°C)	-100°F(-73°C)
Minimum Installation Temperature	32°F (0°C)		Ambient 0°F (-18°C) Product 10°F (-12°C)	Ambient 32°F (0°C) Product 70°F (21°C)	32°F (0°C)	Ambient 32°F (0°C) Product ³ 200°F (93°C)	10°F (-12°C)
Heat Transfer Coefficient, U	Tracer to pipe wall 20-40 Btu/hr.°F-ft² (114-227 w/m².°C)		Tracer to pipe wall 20-40 Btu/hr.ºF-ft² (114-227 w/m².ºC)		Tracer to pipe wall 20-40 Btu/hr.°F·ft² (114-227 w/m².°C)	Heater to tank wall 20-40 Btu/hr.°F·ft² (114-227 w/m².°C)	Tracer to pipe wall 20-40 Btu/hr.°F.ft² (114-227 w/m².°C)
Bond Shear	150 lbs/in² (1.034 kPa)		1,000-1,800 lbs/in² (6,895-12,411 kPa)		1,000 lbs/in² (6,895 kPa)	N/A	100-150 lbs/in² (689-1,034 kPa)
Start-Up Technique	No special curing procedure required if installed with TFK channel; otherwise, compounds must be cured for 4-12 hours at 160°F to 212°F (71°C to 100°C).		No special curing procedure required. T-80 and T-85 cure in 4-12 hours at 212°F to 325°F (100°C to 163°C).		No special curing procedure required.	No special curing procedure required.	Must be heated to 200°F (93°C) to promote surface wetting and curing.
Method of Installation	Hand trowel or use with TFK channel (Carbon steel tube tracers are not recommended) (ALP primer must be applied to aluminum surfaces)		Manual or air-powered cartridge gun (Electrically heated barrel available)		Hand trowel	Hand trowel on plate- type heating coils	Use with TFK channe
Water Soluble	Yes		No		No	No	No
Electrical Resistivity	0.267 ohm/inch (0.105 ohm/cm)	3.3 ohms/inch (1.299 ohms/cm)	146 ohms/inch (57 ohms/cm)		146 ohms/inch (57 ohms/cm)	320 ohms/inch (126 ohms/cm)	146 ohms/inch (57 ohms/cm)
Shelf Life	1 Year		90 days for 1/10-gallon (0.379 liter) cartridges, 30 days for 1 and 5-gallon (3.79 and 18.93-liter) cans, (Shelf life can be extended up to 1 year is material is stored below 40°F [4°C]).		1 Year (unmixed)	Indefinite	Indefinite
Container Size Available	1-gal (3.79 l) cans 5-gal (18.93 l) cans		1/10-gal (0.379 l) cartridges 1 and 5-gal (3.79 l and 18.93 l) cans		1-quart (0.946 l) cans 1-gal (3.79 -) cans	1-quart (0.946 l) cans 1-gal (3.79 l) cans 5-gal (18.93 l) cans	4-foot (1.22-m) lengths 25 sections per box
Weight per Unit	14 lbs (6.4 kg)/gal		13 lbs (5.9 kg)/gal		13 lbs (5.9 kg)/gal	13 lbs (5.9 kg)/gal	0.33 lb/ft (0.05 kg/m)

Note: SnapTrace heat transfer compounds must be heated to a temperature of at least 200°F (93°C) to promote surface wetting and curing. For applications where the heating media and the equipment will be below 200°F (93°C), the materials must be heated to 200°F (93°C) before returning to the lower operating temperature.





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