



# Heat Transfer Compounds

## PRODUCT SELECTION CHART

**T-3, T-85, & T-99  
NEW FORMULATION!**

Product	T-3	T-99	SnapTrace®	EFS™-1	T-85	T-802	NH Nonhardening
<b>Application</b>	Provide an efficient thermal connection between the tracer and the process equipment where high temperature maintenance is required. Also used with Thermon's ChannelTrace™ system featuring TFK channels.		Performed compound designed for rapid, consistent installation under TFK channel on straight runs of piping.	Performed flexible sheet of heat transfer compound designed for use between plate-type coils and process vessels.	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.
<b>Maximum Exposure Temperature</b>	454°C (850°F)	1204°C (2,200°F)	208°C (406°F)	208°C (406°F)	232°C (450°F)	135°C (275°F)	190°C (375°F)
<b>Minimum Exposure Temperature</b>	-196°C (-320°F)		-73°C (-100°F)	-73°C (-100°F)	-196°C (-320°F)	-196°C (-320°F)	-196°C (-320°F)
<b>Minimum Installation Temperature</b>	0°C (32°F)		-12°C (10°F)	-12°C (10°F)	Ambient 0°C (32°F) Product 10°C (50°F)	0°C (32°F)	Ambient 0°C (32°F) Product > 93°C (200°F)
<b>Heat Transfer Coefficient, U<sub>t</sub> Heater to Surface</b>	114-227 w/m <sup>2</sup> •°C (20-40 Btu/hr•°F•ft <sup>2</sup> )	85-170 w/m <sup>2</sup> •°C (15-30 Btu/hr•°F•ft <sup>2</sup> )	114-227 w/m <sup>2</sup> •°C (20-40 Btu/hr•°F•ft <sup>2</sup> )	114-227 w/m <sup>2</sup> •°C (20-40 Btu/hr•°F•ft <sup>2</sup> )	114-227 w/m <sup>2</sup> •°C (20-40 Btu/hr•°F•ft <sup>2</sup> )	114-227 w/m <sup>2</sup> •°C (20-40 Btu/hr•°F•ft <sup>2</sup> )	114-227 w/m <sup>2</sup> •°C (20-40 Btu/hr•°F•ft <sup>2</sup> )
<b>Bond Strength</b>	> 1380 kPa (> 200 lb/in <sup>2</sup> )	> 2760 kPa (> 400 lb/in <sup>2</sup> )	689-1,034 kPa (100-150 lbs/in <sup>2</sup> )	689-1,034 kPa (100-150 lbs/in <sup>2</sup> )	> 20,700 kPa (> 3,000 lb/in <sup>2</sup> )	6,895 kPa (1,000 lbs/in <sup>2</sup> )	N/A
<b>Start-Up Technique</b>	No special curing procedure required with TFK channel; otherwise, compounds must be cured for 4-12 hours at 71-100°C (160-212°F).	Must be heated to 94°C (200°F) to promote surface wetting and curing. <sup>1</sup>	Must be heated to 94°C (200°F) to promote surface wetting and curing. <sup>1</sup>	Must be heated to 94°C (200°F) to promote surface wetting and curing. <sup>1</sup>	No special curing procedure required. T-85 cures in 4-12 hours at 100-121°C (212-250°F).	No special curing procedure required.	No special curing procedure required.
<b>Method of Installation</b>	Hand trowel or use with TFK channel (Carbon steel tube tracers are not recommended) (Primer must be applied to aluminum surfaces)	Use with TFK channel	Use with TFK channel	Place the EFS-1 between heat source and equipment	Cartridge applicator (300 ml) Hand trowel (4 and 20 liter pails)	Hand trowel	Hand trowel on plate-type heating coils
<b>Water Soluble</b>	Yes	No	No	No	No	No	No
<b>Shelf Life</b>	1 year (if stored below 66°C/150°F)	Indefinite (if stored below 49°C/120°F)	Indefinite	Indefinite	1 year (if stored below 30°C/86°F)	1 year (unmixed)	Indefinite
<b>Container Size Available</b>	1 gallon (3.79-liter) pail 2 gallon (7.57-liter) pail 5 gallon (18.93-liter) pail	1 gallon (3.79-liter) pail	1.22 m (4 ft) lengths 25 sections per box	305 mm (12 in) wide, 3.2 mm (1/8 in) thick sections up to 152 m (500 ft) in length	300 ml (10.1 oz) cartridge 4 liter (1.06 gallon) pail 20 liter (5.28 gallon) pail	1 gallon (3.79-liter) can	1 quart (0.946-liter) can 1 gallon (3.79-liter) pail 5 gallon (18.93-liter) can
<b>Density</b>	Specific Gravity=1.6	Specific Gravity=1.9	0.5 kg/m (0.33 lb/ft)	1.2 kg/m (0.80 lb/ft)	Specific Gravity=1.5	Specific Gravity=1.5	Specific Gravity=1.5

**Note**

1. SnapTrace and EFS-1 heat transfer compounds must be heated to a temperature of at least 93°C (200°F) to promote surface wetting and curing. For applications where the heating media and the equipment will be below 93°C (200°F), the materials must be heated to 93°C (200°F) for optimal performance at the lower operating temperature.

**THERMON**

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