



PRODUCT SPECIFICATIONS

# T-75 MID-RANGE HEAT TRANSFER COMPOUND

### APPLICATION

T-75 is a heat transfer compound specifically formulated for its smooth texture and exceptional bonding strength. The smooth texture allows for easy spreading over surface heaters such as Thermon HeetSheet® tank heating units and other plate type coils for applications above the temperature limits of Non-Hardening compounds-375°F (190°C). The compound may also be applied to steam or thermal fluid tracers that are attached to process piping and equipment for the purpose of heating or cooling. T-75 provides a highly efficient heat transfer for any surface mounted heater within its temperature range. In addition to tubular tracers, T-75 may also be applied to the surface of clamp-on heating elements or over small-bore rigid pipe tracers.

T-75 has superior surface wetting characteristics for excellent heat transfer rates where a good thermal bond is required. Contact resistance at the interface of the compound and the surface to be heated will diminish the heat transfer rate. Resistance to heat transfer is compounded due to scale, rust, grease or other contaminants that have not been removed from the contact surface before applying the heat transfer compound. Contact surfaces must be prepared just as though a paint or primer is to be applied. Surface pretreatment should be carried out in accordance with the appropriate SSPC (The Society for Protective Coatings) and NACE International (The Corrosion Society) surface preparation guides and specifications. Steam or thermal fluid tracers properly installed with T-75 will have a heat transfer coefficient of 20 to 40 Btu/hr-ft<sup>2</sup>-°F (114-227 W/m<sup>2</sup>-°C).

### SPECIFICATIONS/RATINGS

Container sizes..... 1 & 2 gallon (3.8 & 7.6-liter) pails  
Max. continuous operating temperature.... 800°F (425°C)  
Minimum exposure temperature.....-320°F (-196°C)  
Minimum installation temperature .....32°F (0°C)  
Heat transfer coefficient, U<sub>i</sub> ..... tracer to pipe wall  
20-40 Btu/hr °F ft<sup>2</sup> (114-227 w/m<sup>2</sup> °C)  
Shelf life (unopened) ..... 1 year  
Nominal bond shear ..... 225 lbs/in<sup>2</sup> (15.8 kg/cm<sup>2</sup>)  
Water-soluble .....yes

\* New BondTrace formulations by Thermon increase long-term temperature stability as well as bond strength.



### DESCRIPTION

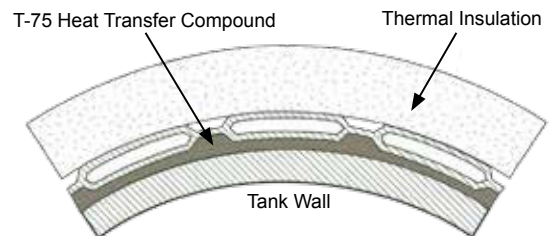
T-75 heat transfer compounds are supplied in rugged re-sealable pails and have a standard shelf life of 1 year prior to opening. Compounds will harden when exposed to air and heat.

T-75 may be applied by hand trowelling onto surfaces or may be installed with TFK channels for tracing applications.

For surface applications, T-75 is typically installed in layers of 1/16" to 1/4" (1.5mm to 6mm) thick. A one-gallon pail will cover 12 ft<sup>2</sup> of surface area if applied 1/8-inch thick. A 3.79-liter (1- gallon) pail covers 1.10 m<sup>2</sup> of surface area with 3.0mm of material.

### BENEFITS

- Exceptional bond strength and resists thermal expansion and contraction
- High shock resistance when exposed to extensive thermal cycling
- Thermally stable at continuous temperature exposures at 800°F (425°C)
- Fine grain size and smooth texture for ease in workability
- Water soluble for easy clean-up



Typical Installed Cross Section

**THERMON The Heat Tracing Specialists®**

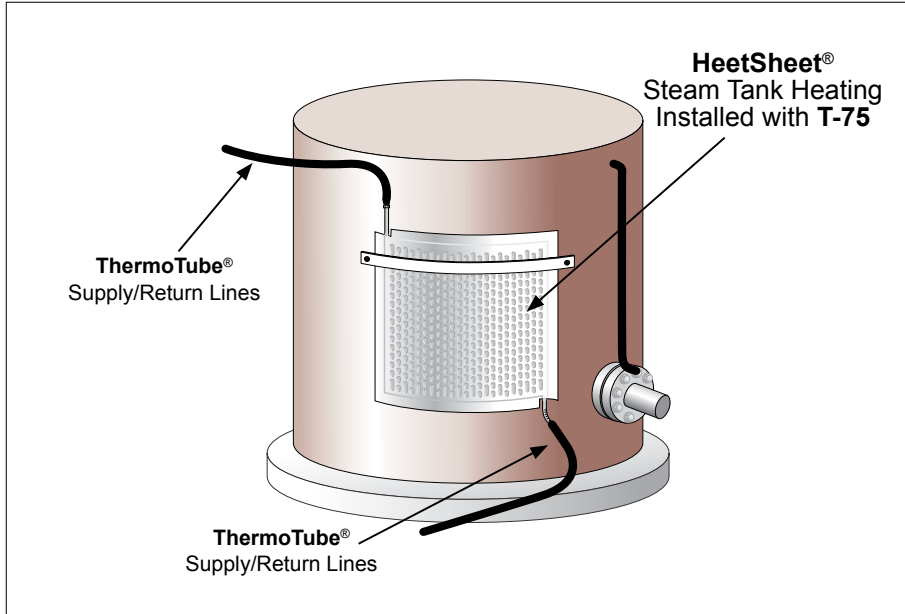


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# T-75 MID-RANGE HEAT TRANSFER COMPOUND

## TYPICAL TANK HEATING SYSTEM



## BASIC ACCESSORIES ...



**Stainless Steel Banding** used to secure tracer to piping.

**ALP-1** dielectric coating applied to aluminum pipe prior to T-75 compound application.

**T2SSB** (.50" x .020") for 3/8" and 1/2" O.D. tube tracers.

**T3SSB** (.50" x .030") for 3/4" and 1" O.D. tube tracers and NPS pipe tracers.

**T34PB-CR** crimp seals for fastening tensioned banding.

**C001** banding tool for applying tension to T2SSB or T3SSB banding.

**1950A** crimping tool for T34PB-CR seals.

## TFK CHANNEL CONFIGURATIONS

T-75 heat transfer compounds are typically installed with metallic TFK jackets specifically designed for tracing service. Refer to Form TPS0032 for TFK channel order information.

Catalog Number	Nominal TFK Channel Dimensions				Channel Material
	Width in (mm)	Height in (mm)	Length ft (m)	Thickness in (mm)	
TFK-4	1.18 (30)	.84 (21)	.04 (1.2)	.04 (1.0)	Rigid Galvanized Steel
TFK-6	2.00 (51)	1.00 (25)	.04 (1.2)	.03 (0.7)	Flexible Stainless Steel
TFK-7	1.62 (41)	1.22 (25)	.04 (1.2)	.04 (1.0)	Rigid Galvanized Steel
TFK-8	0.66 (17)	.75 (19)	.04 (1.2)	.04 (1.0)	Rigid Galvanized Steel
TFK-9	2.50 (64)	1.75 (44)	.04 (1.2)	.06 (1.6)	Rigid Galvanized Steel

**Note:** Galvanized TFK channels are used up to 410°F (210°C). Use optional stainless steel channels for higher temperatures.

## T-75 HEAT TRANSFER COMPOUNDS

T-75 maintains thermal stability throughout its rated temperature range of -320°F to 800°F (-196°C to 425°C) without any significant weight loss after curing unlike many conventional heat transfer compounds.

Catalog Number	Description	Container Type
T-75-1	1-Gallon (3.8 Liter) Container	Plastic
T-75-2	2-Gallon (7.6 Liter) Container	Plastic



### TFK Channels for ChannelTrace Systems

**TFK-4** for 3/8" or 1/2" O.D. tubing.

**TFK-6** flexible stainless steel for 3/8" - 3/4" tubing.

**TFK-7** for 3/4" O.D. tube or 1/2" NPS pipe tracers.

**TFK-8** for 3/8" tubing on small lines.

**TFK-9** for 1" O.D. tube or 1" NPS pipe tracers.

(Galvanized steel is standard - contact Thermon for optional stainless steel)



**ThermoTube** pre-insulated tubing used for steam supply and condensate return lines. Available in various materials and ratings.