Rev 01/11

TECHNICAL DATA SHEET

**Quick Cure Two-Component Polyurethane Foam**
Applies to Product ID# TF605 and TF205 Portable Spray Foam Insulation Systems By
Commercial Thermal Solutions, Inc.

**Approvals and Standards**
ODP (Ozone-Depletion Potential): Contains non-ozone-depleting, non-flammable HFC Propellant.

VOC Content: Contains no VOC's, according to currently accepted definitions.

"Class 2" – material which will achieve a Flame Spread of 75 or less and a Smoke Developed rating of 450 or less when tested according to ASTM E-84. DIN 4102-1 is a common European fire standard for building materials.

Tiger Foam package is patented under U.S. patent.

**Tiger Foam** conforms to international guidelines for protection of the ozone layer and with respect to the Montreal Protocol of 1987 and other environmental guidelines.

**Applications**
Spray foam onto any dry, clean surface in any direction to seal, insulate, or fill voids, reduce vibration or deaden sound. This product will adhere to practically any substrate except Teflon®, oily surfaces, greases, polypropylene, polyethylene, silicone, seals, mold release agents & similar materials. Protect surfaces not to be foamed. Always read all safety data sheets and operating instructions including use of proper personal protective equipment prior to use.

**Product Description**

Tiger Foam Quick Cure foam insulation is a multipurpose, two-part, closed-cell polyurethane formula. The packaging, delivery system, and components were designed to be user- and environmentally friendly. These systems are both portable and disposable. They are completely self-contained to provide flexibility in end use performance.
Details at our website: www.tigerfoam.com

**Properties**
Two-part foam systems will begin to expand immediately upon chemical reaction of the "A" component (a polymeric isocyanate) and "B" component (a polyol blended with proprietary additive ratios) chemicals to a volume that is 3-5 times the dispensed volume, depending on ambient conditions. The foam will cure to semi-rigid, closed-cell foam. Optimum application temperature of the chemicals in the tanks is 75° F (24° C) to 85° F (34° C) and may be sprayed onto colder or warmer substrates, with slight effects on the foam's characteristics. Cured foam is resistant to heat and cold -200° F to +240° F (-129° C to +116° C). It is also resistant to negative effects of aging. It is not resistant to UV light and must be painted, coated, or covered if exposed to direct sunlight after application.

Cured polyurethane foam is chemically inert and non-reactive in approved applications, and will not harm electrical wire insulations, Romex®, rubber, PVC, polyethylene (i.e., PEX) or other plastic. It is approved for use around wires, plumbing penetrations, etc., and contains no formaldehyde. Tiger Foam creates a tight seal that insulates and protects against dust, air infiltration, pests, and sound.

**Special Features**

Cleanable tips (use Acetone)
Metered spray gun
Tiger Foam systems do not require outside electrical or mechanical power source.

**Technical Data (Metric data shown in parentheses)**

R-Value (Metric RSI in parentheses Initial R7 / Aged R6 per inch (RSI=1.05/inch)

Density: ASTM D-1622
1.75 lbs/ft³ (28 kg/m³)

K-Factor (per inch): ASTM C-518 - aged 28 days

0.16 BTU·inch / ft²·h·°F (0.02 W/m·K)

Air Barrier Properties: ASTM E-283
@ 1.57 psf (75 Pa) <0.0025 cfm/ft² (<0.0125 L/s/m²)
@ 6.24 psf (300 Pa) <0.01 cfm/ ft² (<0.05 L/s/m²)

Perm Rating: ASTM E-96 method A
@ 1" (2.54 cm) = 1.99
@ 2.5" (6.35 cm) = 1.18

Tensile Strength: ASTM D1623
Parallel 46 psi (317 kPa)

Compressive Strength: ASTM D-1621
Parallel @ 10% 27psi (186 kPa)
Perpendicular @ 10% 18 psi (124 kPa)

Dimensional Stability: ASTM D-2126
Heat Age +158° F (70° C) -0.6%
Humid Age +158° F (70° C), 100% RH +2.9%
Cold Age -4° F (-20° C) -0.3%

Closed Cell Content - ASTM D-2856
Greater than 90%

Tack Free/Expansion Time: 30-60 seconds

Cuttable: 2-5 minutes
Sandable: 1 hour
Paintable: 5 minutes
Fully Cured: 1 hour

Theoretical Yield:
TF605 = 600 board feet expanded 1" = 50 cu. ft. (1.42 m³)
TF205 = 200 board feet expanded 1" = 16 cu. ft. (.45 m³)
*Yields are based on theoretical calculations, for comparative purposes, and will vary depending on ambient conditions and particular application. For calculating actual yield, it is recommended to reduce this theoretical yield by 10-12% to allow for these variations.

Tank Specifications:
DOT—39 Approved Cylinder
TF605: 58 lbs per tank, 116 lbs per kit
Box Dimensions:
H: 18" (45.7 cm)
W: 13" (33 cm)
L: 13" (33 cm)
TF205: 21 lbs per tank, 42 lbs per kit
Box Dimensions:
H: 16" (40.6 cm)
W: 9" (22.9 cm)
L: 16" (40.6 cm)
*Filled tank weights are approximate for estimation purposes only. Actual gross weight is formulation specific and may be slightly higher or lower.

Product Storage: Store in dry area below 120° F (49°). Optimal storage temperature is 60° F - 80° F (15° C to 26° C). Do not expose to open flame or temperatures above 120° F (49° C). Excessive heat or cold can cause premature aging of components resulting in a shorter shelf life. Tiger Foam is reusable as long as it is stored in a warm place, nozzle tip is changed, and product is shaken before using.

Cold Weather: For best results, the foam chemical temperature must be between 75°F-85°F (24°-29°C). Warm kits for a minimum of 1 day at room temperature. In extreme cold conditions during shipment or storage are encountered, warm tanks for several days at room temperature and shake well, prior to warming chemical for spray application.

Warning: Use only in well-ventilated area with certified respiratory protection. Wear gloves, eye protection, and protective clothing during application. Read all instructions and safety information (MSDS) prior to use. The product contains NO FORMALDEHYDE. Cured foam is non-toxic.

**KEEP OUT OF REACH OF CHILDREN**

Always read all operating, application, and safety instructions before using any products from Tiger Foam. Use in conformance with all local, state, and federal regulations and safety requirements. Failure to strictly adhere to any recommended procedures and reasonable safety precautions shall release Tiger Foam from all liability with respect to the materials or use thereof.

Note: Physical properties shown are typical and serve only as a guide for engineering design.
Results are obtained from specimens under ideal laboratory conditions and may vary upon use, temperature, and ambient conditions. Right to change physical properties as a result of technical progress is reserved. This information supersedes all previously published data. Yields shown are based on theoretical calculations and will vary depending on ambient conditions and particular application. Read all product directions and safety information before use. Consult local building codes for specific requirements regarding the use of cellular plastics or urethane products in construction.

Limited Warranty: The Manufacturer warrants only that the product shall meet its specifications: this warranty is in lieu of all written or unwritten, expressed, or implied warranties and the Manufacturer expressly disclaims any warranty of merchantability, or fitness for a particular purpose. The buyer assumes all risks whatsoever as to the use of the material. Buyer's exclusive remedy as to any breach of warranty, negligence, or other claim shall be limited to the replacement of the material. Failure to strictly adhere to any recommended procedures shall release the Manufacturer from all liability with respect to the materials or use thereof. User of this product must determine suitability for any particular purpose, including, but not limited to, structural requirements, performance specifications, and application requirements.