



A Commercial Thermal Solutions Company

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**Technical Data Sheet** - E-84 Fire Rated Fast Rise Polyurethane Foam Formula  
Applies to Product ID# **TG600FR** and **TG200FR** Portable Spray Foam Insulation Systems

**Approvals and Standards:**

ASTM E-84 - Class 1 Approval  
Flame Spread: =25 Smoke Developed: =200

ODP (Ozone Depletion Potential): Contains non-ozone depleting, non-flammable HFC Propellant - Commonly referred to as "water-blown".

**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, utilizes an approved propellant.

**Application:** Spray foam onto any dry, clean surface in any direction, even to the underside of a floor or roof deck. This product is very adhesive and will stick to practically any substrate except Teflon or oily surface and seals, insulated and is especially critical where flame retardant specifications require E-84 Class 1 foam.

**Properties:** Two component foam systems will begin to expand immediately upon chemical reaction of the "A" component (a polymeric isocyanate) and "B" (a polyol blended with proprietary additive ratios) component chemicals to a volume that is 5-8 times the dispensed volume, depending on ambient conditions. The foam will cure to a 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 +200° F (-129° to +93°C). It is also resistant to any 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 foam is also chemically inert and non-reactive in approved applications. Tiger Foam systems require no outside electrical or mechanical power source. When sprayed, TIGER FOAM provides a continuous thermolitic barrier.

**Technical Data:**

Density: 1.75 lbs./ft<sup>3</sup> (28 kg./m.<sup>3</sup>)  
K-Factor: (ft<sup>2</sup>)(h)(°F)=BTU/inch 0.162  
R-Value: 6.2 - 7.4 (depends on external factors such as temperature and humidity during application and curing.)  
Perm Rating: @ 1" = 2.6 @ 3" = 1.2  
Tensile Strength: Parallel@10% = 45psi (310 kPa)  
Compressive: Parallel@10% = 22psi (152 kPa)  
Closed Cell Content = Greater Than 90%

Tack Free Expansion Time:  
30-60 sec  
Cuttable: 2-5 Minutes  
Sandable: 1 hour  
Paintable: 5 Minutes  
Theoretical Yield:  
TG600FR = 600 bd ft exp (50 cu. ft.)  
TG200FR = 200 bd ft exp (17 cu. ft.)  
Expands approx. 8:1 from liquid state

Tank Specs:  
DOT - 39 Approved Cylinders  
TG600FR  
H: 26" W: 17"  
Weight: 62 lbs. per tank 115 lbs per kit  
TG200FR  
H: 18" W: 12"  
Weight: 21 lbs. per tank 42 lbs per kit

**Product Description:**

Tiger Foam E-84 Class 1 Fire Rated foam insulation is a multi-purpose, two component, closed-cell polyurethane foam formula specifically formulated for fire retardancy. The packaging and delivery system and components were designed to be user and environmentally friendly. These systems are both portable and disposable and completely self-contained to provide flexibility in end use performance. Thermal Insulation, sealant, vibration absorption, flotation, sound or condensation control - all perfect applications for **Tiger Foam** Products. Details at our website: [www.tigerfoam.com](http://www.tigerfoam.com)

**Special Features:**

Cleanable Tips (use acetone)  
Metered Spray Gun  
Guns and hoses come factory assembled  
Hoses extend from top of tank and sprayed upright

**Tiger Foam Insulation. Unleash the Beast on Your Insulation Project!**

**Always read all operation, application and safety instructions before using any products from Commercial Thermal Solutions, Inc. / Tiger Foam Products.** 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 Commercial Thermal Solutions, Inc. / Tiger Foam Products of all liability with respect to the materials or the use thereof. For additional information, call Commercial Thermal Solutions, Inc. +1 800.664.0063.

**NOTE:** Physical properties shown are typical and are to 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.

**WARNINGS:** Follow safety precautions and wear protective equipment as recommended. Consult Material Safety Data Sheet (MSDS) for specific information. Use only with adequate ventilation or certified respiratory protection. NIOSH approved positive pressure supplied air respirator is recommended if exposure guidelines may be exceeded. Contents may be very sticky and irritating to skin and eyes, therefore wear protective eyewear, impervious gloves, and suitable work clothing when operating. If liquid chemical comes in contact with skin, first wipe thoroughly with dry cloth, then rinse affected area with water. Wash with soap and water afterwards, and apply hand lotion if desired. If liquid chemical comes in contact with eyes, immediately flush with large volume of clean water for at least 15 minutes and get medical help at once. If liquid is swallowed, get immediate medical attention. Products manufactured or produced from these chemicals are organic and, therefore, combustible. Each user of any product should carefully determine whether there is a potential fire hazard associated with such product in a specific usage. **KEEP OUT OF REACH OF CHILDREN.**

**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. Failure to strictly adhere to any recommended procedures shall release The Manufacturer of all liability with respect to the materials or the 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 prior to installation and after product is applied.