

# TECHNICAL DATA SHEET



## Two-Component Polyurethane Slow Rise Formula

**Tiger Foam Slow Rise Cavity Fill Formula** is a multiple purpose two-component polyurethane foam designed within the international guidelines for protection of the ozone layer, and with respect to the Montreal Protocol, 1987 and other environmental guidelines, utilizing a non-flammable, non-ozone depleting blowing agent to assist in the safety of the end user and the environment. Slow Rise systems have been specifically formulated for flame retardancy, low pressure, and delayed foaming action. The pre-pressurized, portable two-component foam systems are dispensed through the state-of-the-art two-component dispensing gun, providing unsurpassed quality and flexibility in end-use performance.

### Application Areas

Spray foam into any dry cavity to insulate, fill and seal various size voids, dampen sound or reduce vibration. It is specifically designed to spray into cavities, and was formulated not to damage drywall if standard building practices are followed for attachment to studs and drywall is 3/8" or thicker and manufacturer's directions are followed.

### Properties

The patented and user-friendly packaging system provides many unique advantages, including:

- Factory-attached dispensing hoses. No need to attach hoses prior to use.
- Handle is secured to tanks. No more handle popping out of box. No more tanks falling out of box when box gets wet.
- Easy to open box for immediate use.
- Hoses extend from top of tanks. More reach. More stability.

**Tiger Foam Slow Rise Formulation** fully expands and dries tack-free within 4-5 Minutes. It fully cures within several hours. The portable, two-component foam systems expand with approximately an 8-to-1 ratio, and cure to a semi-rigid closed cell foam upon the chemical reaction of component A (a polymeric isocyanate) with component B (a polyol blend containing certain additives).

Tiger Foam Slow Rise Formula adheres to almost all building materials with the exception of surfaces such as polyethylene, Teflon®, silicone, oils and

greases, mold release agents and similar materials.

Optimum application temperature is 85°F (34°

C) but may be sprayed onto colder or warmer substrates, with slight effects on the foam characteristics. Cured foam is resistant to heat and cold, -200°F to +200°F (-129°C to +93° C), and to aging, but not UV rays unless painted, covered or coated. Cured foam is also chemically inert and non-reactive in approved applications.

Tiger Foam Slow Rise systems require no outside mechanical or electrical power source and are available in 2 sizes to meet specific job applications requirements. When sprayed, the foam will create a seamless, continuous seal to insulate and protect against dust, air infiltration, pests, sound, etc.

### Preparation For Use

Substrate must be clean, dry, firm, free of loose particles and free of dust, grease and mold release agents and similar. Protect surfaces not to be foamed. Foam is SAFE for internal wiring and around electrical boxes.

Shake kits for 30 seconds *before* using to mix propellant well and provide for maximum yield. Larger kits just turn end on end 5 or 6 times.

### Application / Use

After following instructions for set-up, systems are ready to use. Attach appropriate hose to tanks A and B if needed. Open tank valves as directed. Materials are dispensed through the hoses and mixed in the disposable nozzle.

With a nozzle attached to the two-component gun, dispense foam by squeezing the trigger of the gun. To interrupt or stop foaming process, release the gun trigger. Once foaming process has stopped, the gun must be reactivated within 30 seconds or a new nozzle must be installed. Fresh foam may be applied in several stages to reduce overfilling of void or damage to non-rigid, confined cavities. Cured foam can only be removed mechanically.

**Important Note:** Use only in well-ventilated area or with certified respiratory protection. Wear gloves, eye protection and protective clothing when using. Read all instructions and safety information (MSDS) prior to use of any product. The product contains no formaldehyde. Cured foam is non-toxic. KEEP OUT OF REACH OF CHILDREN.

### Product Storage

Store in cool dry area. Do not expose to open flame or temperatures above 120°F (49°C). Excessive heat can cause premature aging of components resulting in a shorter shelf life. Tiger Foam Slow Rise Formula is reusable by storing in warm place and changing nozzle tip and shaking before reusing.

A promotional graphic for Tiger Foam Insulation. At the top left is the Tiger Foam logo. To the right, it lists the address "6 Worthington Ave., Spring Lake, NJ 07762" and the toll-free phone number "800.664.0063". Below this is a banner that says "Unleash the Beast on Your Insulation Project!". Underneath the banner, it reads "Commercial Thermal Solutions Inc. has been serving the building &amp; construction industries since 2001." and "Tiger Foam 600 bd. ft. Kit - FR ASTM E-84 Fire Rated Foam Kit. All kits are complete with hose and gun &amp; extra nozzle tips." There is an image of two white foam dispensing tanks. At the bottom, it says "Our pledge is to provide exceptional products &amp; services at a Grrreat price." and "International: (011) 1+270.843.0309". A small image of a tiger is on the right, and the website "www.tigerfoam.com" is at the bottom right.

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## Technical Data

### DENSITY

ASTM D-1622 1.75 lbs/ft<sup>3</sup> ( 28 kg/m<sup>3</sup>)

### K-FACTOR (Per Inch)

ASTM C-518 (initial) BTU (ft) (h) (°F) =0.15 w mk =.022

### R-VALUE (aged)

6-7 / inch

### TENSILE STRENGTH

ASTM D-1623

Parallel @ 7% 35 psi (241 k Pa)  
Perpendicular @10% 39 psi (269 k Pa)

### COMPRESSIVE STRENGTH

ASTM D-1621

Parallel @ 10% 20 psi (138 k Pa)  
Perpendicular @ 10% 20 psi (138 k Pa)

### DIMENSIONAL STABILITY

ASTM D-2126

HEAT AGE (120°F / 50°C, 10%RH, 28 days) +1.90%  
HUMID AGE (120°F / 50°C, 100% RH, 28 days) +8.30%  
COLD AGE (-40°F / -40°C, 7 days) +0.30%

### CLOSED CELL CONTENT

ASTM D-2856 >90%

### MOISTURE VAPOR TRANSMISSION

Parallel 2 perms  
Perpendicular 1.3 perms

TACK-FREE / EXPANSION TIME 90 seconds

CUTTABLE 5 minutes

### FIRE RATING

DIN 4102-1

B2

**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.**

## Approvals / Standards

Tiger Foam Slow Rise Formulation conforms to the requirements of

B2 Fire Rated Building Product.  
(Third party test report HPVA, T-10200)

Meets or exceeds the Coast Guard specification requirements for flotation in the title 33 code of the Federal Regulations, paragraph 183.114 and meets the requirements of DIN 4102-1 for a B2 Building Material

Dispensing gun is patented under U.S. patent #6,345,776. Other foreign and domestic patents pending.

ODP (Ozone Depletion Potential): Contains non-ozone depleting, non-flammable HFC propellant.

## Theoretical Yield\*

	600
<b>TF600SR</b>	board
	feet or
	50
	Cubic
	Feet

**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.

Commercial Thermal Solutions, Inc. – Foam Products Division – TDS TF600SR – Chemtrec #201586