TECHNICAL DATA SHEET

TIGER FOAM inc.

Slow-Rise Polyurethane Foam Formula

Applies to Product ID# TF600SR and TF200SR Portable Spray Foam Insulation Systems

Approvals and Standards

Meets or exceeds the Coast Guard specification requirements for flotation in Title 33 of the Federal Regulations, paragraph 183.114 and meets the requirements of DIN 4102-1 for a B2 building material.

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

Tiger Foam conforms to the requirements of: B2 Fire-Rated building product and 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 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 formulated not to damage drywall if standard building practices are followed for attachment to studs, drywall is 3/8" or thicker, and the manufacturer's directions are followed. Tiger Foam Slow-Rise Formula adheres to almost all building materials with the exception of surfaces such as polyethylene, Teflon®, silicone, oils, greases, mold release agents, or similar materials. Substrate must be clean, dry, firm, and free of loose particles. Protect surfaces not to be foamed. Foam is safe for internal wiring and around electrical boxes.

Product Description

Tiger Foam Slow-Rise Cavity Fill Formula is a multipurpose, two-part closed-cell polyurethane formula specifically manufactured for fire retardancy, low pressure, and delayed foaming action. 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 an 8:1 rise ratio of the dispensed chemicals, 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° C 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 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
Guns and hoses come factory assembled
Hoses extend from top of tank and spray upright
Tiger Foam systems do not require outside electrical or mechanical power source.

Technical Data (Metric data shown in parentheses)

Density: 2.0 lbs/ft^3 (32 kg/m^3)
ASTM D-1622

K-Factor (per inch): (ft^2)(hr)(° F) = BTU inch 0.168 (0.024 W/m·K)
ASTM C-518—aged 28 day value

R-Value (aged): 6-7 per inch (RSI = 1.04/in, 0.41/cm)

Tensile Strength: ASTM D-1623
Parallel @ 7% = 42psi (290 kPa)
Perpendicular @ 10% = 28psi (193 kPa)

Compressive Strength: ASTM D-1621
Parallel @ 10% = 14psi (97 kPa)
Perpendicular @ 10% = 15psi (103 kPa)

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

Moisture Vapor Transmission:
Parallel – 2 perms
Perpendicular – 1.3 perms

Dimensional Stability: ASTM D-2126
Heat Age: (120° F/50° C, 10% RH, 28 days)
Humid Age: (120° F/50° C, 100% RH, 28 days)
Cold Age: (-40° F/-40° C, 7 days)

Tack Free/Expansion Time: 90 seconds

Cuttable: 5 minutes
Fully cured within several hours

Fire Rating: DIN 4102-1 B2

Theoretical Yield:
TF600SR = 500 board feet or 42 cu. ft. (1.42 m^3)
TF200SR = 166 board feet or 14 cu. ft. (.45 m^3)
Expands approximately 5 to 8 times from liquid state

*Yields are based on theoretical calculations, for comparative purposes, and will vary depending on ambient conditions and particular application.

Tank Specifications:
DOT—39 Approved Cylinder
TF600FR: 62 lbs per tank, 115 lbs per kit
H: 26" (66.04 cm)
W: 17" (43.2 cm)
TF200FR: 21 lbs per tank, 42 lbs per kit
H: 18" (45.7 cm)
W: 12" (30.5 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 a 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 as long as it is stored in a warm place, nozzle tip is changed, and product is shaken before using.

Warning: Use only in well-ventilated area or 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.