

HF 402 FAST HydroFoam

DESCRIPTION:

HydroFoam 402 FAST is a dual-component, hydro-insensitive, expansive polyurethane foam specifically designed for jobs where water or moisture is present. This 4 lb. per cubic foot foam was designed to set up in the presence of water and to maintain dimensional stability in wet environments. HF402 can be used for residential, commercial and/or industrial applications.

APPLICATIONS:

- Jobs in which standing water or high moisture is present
- Deep Foamjection™
- Seawalls
- Soil Stabilization
- Void Filling

BENEFITS:

- Hydro-insensitive (Maintains dimensional stability in wet environments)
- Up to 18x expansion
- Faster reaction time than HF 402

TECHNICAL DATA:

Density ASTM D1622

Average (lbs./ft³) 4.0-4.5

Compression Properties ASTM D1621

Modulus (psi) 1582
 Compressive Strength (psi) 90-100
 Crushing Strength Elongation (%) 18

Tensile Properties ASTM D1623 Modulus

(psi) 4117
 Breaking Strength Stress Avg. (psi) Breaking Strength Elongation (%) 124 4.4

Shear Properties ASTM C273 Modulus

(psi) 758
 Breaking Strength Stress Avg. (psi) Breaking Strength Elongation (%) 78.3 56.1

Reaction Profile (Lab tested at 95°F) Time at

Reaction (mm:sec) 00:06
 Peak Exotherm (°f) 242
 Time at Peak Exotherm (mm:sec) 00:28
 Time at Tack Free (mm:sec) 00:23
 Time at Peak Expansion (mm:sec) 00:32

Environmental Impact

Resin Biobased Carbon (%) ASTM D6866-16 Foam 24
 Toxicity (TCLP – Protocol SW846)
 VOC's UNDETECTED
 SVOCs UNDETECTED
 PCBs UNDETECTED
 Metals UNDETECTED

Water Absorption ASTM D2842 Water

Absorption (Vol. Basis) (%) Water 0.27
 Absorption (Area Basis) (lb/ft) 0.009

Response to Thermal and Humid Aging ASTM D2126

Change from Initial Volume <1%

HF 402 FAST

HydroFoam

EQUIPMENT & COMPONENT RATIOS:

The two part polyurethane process will give optimal performance when all systems are operating in correct sequence. Recirculate the material well before use. RR A (part A) is connected to the isocyanate pump with Polyol (part B) connected to the resin/polyol pump. Part A and Part B must be mixed on a 1:1 ratio for designed reaction time, expansion rate, cure time, and density.

STORAGE OF CHEMICALS:

Store in original container protected from direct sunlight in a dry, cool and well ventilated area, away from heat, sparks, open flame, strong oxidizers, radiation and other initiators. Keep container tightly closed and sealed until ready for use. Do not store above 100°F Do not allow material to freeze; Condensation and moisture can cause the material to crystallize.

SAFE HANDLING OF LIQUID COMPONENTS

Take skin, auditory, eye and respiratory safety precautions during material handling and installation. Avoid breathing vapors or spray mists for long periods of time. Avoid contact with eyes, skin, and clothing. In case of eye contact, gently flush eyes with large amounts of water for at least 15 minutes and get prompt medical attention. If chemicals contact with clothing and skin, remove contaminated clothing and launder. Flush skin with lukewarm water for at least 15 minutes and seek medical attention if irritation to skin occurs. For more information, refer to Polyol Resin Blends Safety and Handling Guidelines

(Technical Bulletin AX228) issued by Alliance for the Polyurethanes Industry. Arlington, VA: American Plastics Council.

SAFETY PRECAUTIONS:

If used incorrectly, the polyurethane foam may present a serious fire hazard. Part A and Part B mix to make foam that creates a chemical reaction which produces heat and fumes. While installing material, inject material, wait for expansion, wait to cool off, and then install additional material. DO NOT install additional material before this reaction is complete. Applying foams too thick in a single injection can build dangerously high temperatures inside the finished foam, which could lead to splitting, charring, or even spontaneous combustion.

The Manufacturer recommends that thickness not exceed two inches for closed celled foams. If multiple passes are sprayed or injected, sufficient time must be allowed for the exothermic heat to dissipate before each additional injection is applied. The foam applicator/contractor engaged in the application or use of polyurethane material should be made aware of the combustibility of the foam and fire hazards it can present if misused or over applied. Proper precautions and safety measures should be utilized.