FOAM CONCEPTS, LLC

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FOAM CONCEPTS POUR SYSTEM ES 24-005

DESCRIPTION:

FC ES 24-005 is a two component, water blown, all PMDI based low density pour-in-place polyurethane foam system designed for void filling. FC ES 24-005 has been specifically formulated to facilitate hand bag mixing for specialty applications in the mining industry. FC ES 24-005 is formulated to be mixed 1/1 by volume. This product also meets USCG Title 33, Chapter 1, Part 183 for buoyant foam.

DISTINGUISHING CHARACTERISTICS:

- Ease of Mix
- High Closed Cell Content
- Good Dimensional Stability
- Passes USCG Title 33, Chapter 1, Part 183

TYPICAL RESIN ROPERTIES:

	ES 24-005 R	ES 24-005 A
Viscosity	550 cps	200 cps
Lbs./Gallon	8.8 lbs.	10.2 lbs.
Appearance	transparent, amber liquid	transparent, brown liquid
Shelf Life	6 months	6 months

MIX RATIO:

	E S 24-005 R	ES 53-104 A
By Weight	100 parts	117 parts
By Volume	100 parts	100 parts

TYPICAL REACTION PROPERTIES:

Hand Mix @ 72°F

Cream Time (sec) 45
Gel Time (sec) 200
Rise Time (sec) 330
Density (FRC) 2.6 pcf

TYPICAL PHYSICAL PROPERTIES:

Core Density ASTM D-1622	2.6 pcf
Compressive Strength ASTM D-1621	35 psi
Tensile Strength ASTM D-1623	45 psi
Shear Strength ASTM C-273	43 psi
Closed Cell Content NCFITM 300	>92%
Moisture Vapor Transmission ASTM C-355	2-4 perm in.
Water Absorption, ASTM D2842	=0.08 lbs/ft^2

Resistance to Solvents Excellent

Resistance to Mold and Mildew Excellent

Maximum Service Temperature 200°F

*The above values are average values obtained from laboratory experiments and should serve only as guide lines.

FC ES 24-005 APPLICATION INFORMATION

EQUIPMENT AND COMPONENT RATIOS:

FC ES 24-005 can be mixed by hand (either mechanically or by bag kneading). Chemicals should be brought to at least 70°F for optimum performance. Materials should be weighed out at the prescribed weight ratio.

FOAMING RECOMMENDATION:

To obtain optimum yield, consistent foam quality and quick set times, the surrounding ground temperature should be 70°F or higher and as free of water as possible.

STORAGE AND USE OF CHEMICALS:

Store chemicals in a cool, dry place out of direct sunlight. ideally below 100°F. If storing bulk chemicals (drums or totes) keep containers tightly closed when not in use and, if possible, under nitrogen pressure of 2 - 3 psi after they have been opened.

Bagged product shelf life may increase if stored with a desiccant type material such as AN or salt. Periodically rolling over the boxes has shown to increase shelf life as well. Remember to rotate your stock and use older product first.

SAFE HANDLING OF LIQUID COMPONENTS:

Use caution in removing bungs from the container. Loosen the small bung first and let any built up gas escape before completely removing. Avoid prolonged breathing of vapors. In case of chemical contact with eyes, flush with water for at least 15 minutes and get medical attention. For further information refer to "MDI-Based Polyurethane Foam Systems: Guidelines for Safe Handling and Disposal" publication AX-119 published by Alliance For The Polyurethanes Industry 1300 Wilson Blvd, Suite 800, Arlington, VA 22209.

Caution:

Polyurethane products manufactured or produced from this liquid system may present a serious fire hazard if improperly used or allowed to remain exposed or unprotected. The character and magnitude of any such hazard will depend on a broad range of factors which are controlled and influenced by the manufacturing and production process, by the mode of application or installation and by the function and usage of the particular product. ***Any flammability rating contained in this literature is not intended to reflect hazards presented by this or any other material under actual fire conditions. These ratings are used solely to measure and describe the product's response to heat and flame under controlled laboratory conditions.*** Each person, firm or corporation engaged in the manufacture, production, application, installation or use of any polyurethane product should carefully determine whether there is a potential fire hazard associated with such product in a specific usage, and utilize all appropriate precautionary and safety measures.