

## TECHNICAL DATA SHEET

### PROFILL OC-500 PLUS

#### DESCRIPTION:

PROFILL PLUS-OC-500 PLUS is a two component, one-to-one by volume, no-mix, open cell, self-adhering, seamless, sealant/air barrier spray applied polyurethane foam insulation system. This spray foam system has been formulated with water as the blowing agent. This product does not contain CFC, HCFC, HFC or formaldehyde. PROFILL PLUS-OC-500 PLUS is suitable for use in Type V construction as part of the PROFOAM Insulation Systems.

#### DISTINGUISHING CHARACTERISTICS:

- Excellent Air Barrier
- Eliminates Convective Air Movement in Walls
- Good Sound Barrier
- High Yields
- No mixing required
- Good Dimensional Stability
- Meets ASTM E-84, FS<sub>≤</sub>25, SD<450 at 5.5" Thickness

For proper use of this PROFOAM insulating material refer to the PROFOAM Application Information and any of the following codes or guides:

- ICC, International Building Code, Section 2603
- ICC, International Building Code, Section R314
- API Fire Safety Guidelines for Use of Rigid Polyurethane and Polyisocyanurate Foam Insulation in Building Construction (AX230)

Note: The stated values are average values obtained from laboratory measurements and should serve only as guidelines. Free rise core density should not be confused with overall density. Overall densities are always higher than free rise core densities and take into account skin formation, thickness of application, environmental conditions, etc.

#### TYPICAL PHYSICAL PROPERTIES:

Core Density ASTM D1622	0.5 pcf
R-Value @ 4 in. @ 1 in. ASTM C518	13 3.8
VOC Emissions (Off Gassing)	Negligible
Bacteria & Fungal Growth	Does not support
Maximum Service Temperature	140°F
Flammability @ 5.5 inch thickness	
Flame Spread	≤ 25
Smoke Density ASTM E84	< 450

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.

## PROFILL PLUS APPLICATION INFORMATION

### EQUIPMENT AND COMPONENT RATIOS:

The PROFILL PLUS system, consisting of an A and B component, is formulated for spraying with a two component pump specifically designed for spray polyurethane foam systems. The B drum is connected to the resin pump and the A drum is connected to the isocyanate pumps. The proportioning pump ratio is 1:1. The dispensing temperature should be set between 130°F-140°F for automatically controlled machinery to give a good spray pattern. Operating pressure should be 1000 psi static / 800 psi dynamic and a maximum 02 and smaller mixing chambers. For additional assistance contact PROFOAM technical services.

### STORAGE AND USE OF CHEMICALS:

Storage temperature should not exceed 85°F. Do not store in direct sunlight. Keep drums tightly closed when not in use and under dry air or nitrogen pressure of 2-3 psi after they have been opened. Cool storage of the resin extends shelf life. Exposure to temperatures above 85°F will shorten the expected shelf life. Store above 35°F, keep temperature of chemicals near 70°F for several days before use. Cold chemicals can cause poor mixing, pump cavitation or other process problems due to higher viscosity at lower temperatures. The shelf life of PROFOAM PROFILL OC-500 PLUS B drum is 3 months.

### 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 the Center for the Polyurethanes Industry 1300 Wilson Blvd, Suite 800, Arlington, VA 22209.

### PREPARATION OF SURFACE TO BE SPRAYED:

All surfaces to be sprayed should be clean, dry, and free of dew or frost. All metal to which foam is to be applied must be free of oil, grease, etc.

### SPECIAL HANDLING NOTICE

Care should be taken to avoid the introduction of any other chemical system (such as closed cell foam) into the B side drum of PROFILL OC-500 PLUS. It is strongly recommended, at a minimum, the use of a dedicated stainless steel transfer pump for this material to avoid the possibility of cross contamination. Expect that there will be a degree of waste in spraying out the changeover between closed-cell to open-cell foams. Under no circumstances should the user bleed out spray lines of these incompatible foams back into the drum.

### OPTIMUM ADHESION TEMPERATURE OF SURFACE TO BE SPRAYED:

On general work where the surface to be sprayed will remain at ambient temperature or cooler, the surface should be between 50°F and 120°F. Spray a minimum 3" pass thickness for proper cure. In this range the warmer the surface the better the adhesion. In some cases the surface may require a primer. When surfaces are cooler, the spray applicator should spray a test area approximately 20 square feet and check for proper adhesion and cell structure. If both are satisfactory, then the spray application may continue.

### VAPOR BARRIER PROTECTION:

In most instances a vapor barrier/retarder must be used with the application of PROFILL OC-500 PLUS. Please consult the local building codes for information or contact PROFOAM for recommendations.

### CODE-COMPLIANT FIRE RESISTANCE:

Where foam is sprayed over building interiors, building codes require the installation of an approved thermal barrier between the foam insulation and the interior space, such as ½" gypsum board or other approved material. Refer to specific building codes for details. Contact PROFOAM for specific alternate approvals for PROFILL-OC-500 PLUS.

## FOR ANY QUESTIONS REGARDING THE ABOVE RECOMMENDATIONS CONTACT PROFOAM

The information on our data sheets is to assist customers in determining whether our products are suitable for their applications. The customers must satisfy themselves as to the suitability for specific cases. PROFOAM warrants only that the material shall meet its specifications; this warranty is in lieu of all other written or unwritten, expressed or implied warranties and PROFOAM expressly disclaims any warranty of merchantability, fitness for a particular purpose, or freedom from patent infringement. Accordingly, 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 purchase price of the material. Failure to adhere strictly to any recommended procedures shall relieve PROFOAM of all liability with respect to the material or the use thereof.

