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TECHNICAL DATA SHEET

Polar Foam 7217-0F / A100

SPRAY APPLIED RIGID POLYURETHANE FOAM

NEW GENERATION, CLASS I, **ZeroODS**

PF7217-0f / A100 is a two component spray-applied rigid polyurethane foam system specially formulated to meet the “zero ozone depletion substance (ODS)” requirements of the Montreal Protocol and the classification I of the ASTM E-84.

This new friendly environmental foam generation insulation product system contains raw material made from recycled PET plastic material, renewable Soya beans, renewable vegetable oil and it uses **ZeroODS** blowing agents (HFC’s / Water).

| PHYSICAL PROPERTIES | | |
|---------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Method | Description | Value |
| ASTM D1622 | Density | 35 +/- 2 Kg/m ³ (2.2 +/- 0.1 lb/ft ³) |
| ASTM C518 | Thermal Resistivity 1 days @ 23 ⁰ C Plate temperature of 10°C (50°F) / 35°C (95°F) | 1.32 RSI (R7.47) |
| ASTM D2856 | Closed Cell Content (%) | > 92 |
| ASTM D1621 | Compressive Strength (parallel) | 145 kPa (21 psi) |
| ASTM D2126 | Dimensional Stability (% Volume Change) | 28 days |
| | 80 ⁰ C, ambient R.H. | 1.6 |
| | -20 ⁰ C, ambient RH | 0.6 |
| ASTM D2842 | Water Absorption (% volume) (96 hrs. immersion) | < 1.0 |
| ASTM E84 | Surface Burning Characteristics, Class I | |
| | Thickness, inches | 2 |
| | Flame spread index | 20 |
| | Smoke developed | 250 |

The information herein is to assist customers in determining whether our products are suitable for their applications. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty, express or implied, including any warranty of merchantability or fitness, nor is protection from any law or patent inferred. All patent rights are reserved. Like all plastic insulation, the foam product is combustible and must be covered by an approved thermal barrier. The exclusive remedy for all proven claims is replacement of our materials.

PF7217-0f / A100

Typical Liquid Characteristics

| PROPERTY | ISOCYANATE | RESIN |
|-----------------------|----------------------|--------------------|
| Color | Brown | Greenish to bluish |
| Viscosity @ 25°C | 150-250 cps | 200-260 cps |
| Specific gravity | 1.22-1.24 | 1.19-1.21 |
| Shelf life* | 6 months | 6 months |
| Mixing ratio (volume) | 100 | 100 |
| Vapor pressure @ 25°C | 10 ⁻⁷ psi | 10 psi |

* See MSDS for more information.

Processing parameters used for foam's properties determination

| | | |
|----------------------------|---|----------------------------------------|
| Type of machine | : | Graco HP25, # AR5252 mix chamber |
| Components A&B Temperature | : | 44 ⁰ C (112 ⁰ F) |
| Components A & B pressure | : | 5860-6900 kPa (850-1000psi) |
| Ambient temperature | : | -7 ⁰ C (19 ⁰ F) |
| Thickness per pass | : | 51 mm (2 inches) |
| Number of passes | : | 1 |
| Substrate | : | Polyethylene Board |

Reactivity profile through the machine

| | | | |
|------------|----------|----------------|-------------|
| Cream time | Gel time | Tack free time | End of rise |
| 0-1 sec. | 2-3 sec. | 3-4sec. | 3-4 sec. |

RECOMMENDED PROCESSING PROCEDURES

| | | |
|--------------------------------------------------|---|-----------------------------------------------|
| Mixing ratio A/B, volume | : | 1/1 |
| Mixing components temperature | : | 41@44 ⁰ C (106@112 ⁰ F) |
| Mixing dynamic pressure (minimum) | : | 5516 kPa (800 psi) |
| Substrate & Ambient temperature | : | - 10@15 ⁰ C (14@59 ⁰ F) |
| Curing temperature | : | > -10 ⁰ C (14 ⁰ F) |
| Maximum thickness per pass | : | 2 inches |
| Maximum thickness of successive passes | : | 4 inches |
| Minimum cooling time period before applying over | : | 4 hours |

GENERAL INFORMATIONS:

It is recommended that the foam be covered with an approved thermal barrier in accordance to the local and national building codes when used in buildings and a protective coating when used outside. This product should not be used when the continuous service temperature of the substrate is outside the range of -60⁰C to 80⁰C (-76⁰F to 180⁰F).

Respect recommended processing installation procedures, never apply excessive thickness of SPF in one application, it may cause spontaneous combustion of the foam hours after the foam was installed.