# POLARFOAM™ PF 7610-0 (2013)

# TECHNICAL DATA SHEET

**High Service Temperature Spray-applied Polyurethane Tank Foam Insulation,**

**0 ODP**

**Polarfoam™ PF7610-0 Exp is a two-component spray-applied rigid polyurethane foam system specially formulated to meet the zero ozone depletion potential (ODP) requirements of the Montreal Protocol and formulated for high service temperature up to 121°C (250°F) in application as tank, pipe and others.**

**This new friendly environmental tank foam generation insulation product system contains raw material made from recycled PET plastic material & renewable Soya beans oil and Zero ODP blowing agents.**

**PHYSICAL PROPERTIES**

**Method Description Value**

**ASTM D1622 Density 40 +/- 2 Kg/m3**

**(2.5 +/- 0.1 lb/ft3)**

**ASTM C518 Initial Thermal Resistivity (2 days) 1.29 m2.0C/ W**

**(7.3 ft2. h.0F/BTU.in)**

**ASTM D2856 Closed Cell Content (%) >92**

**ASTM D1621 Compressive Strength 214 kPa (31 psi)**

**(Parallel to expansion, 10%)**

**ASTM D2126 Dimensional Stability,**

**% Volume Change @ 7 days**

**(Volume change % under core foam sample of 4in. x 4in. x 1 ½ in.)**

**▪ 1200C, ambient R.H. 7.7**

**▪ 800C, ambient R.H. -0.4**

**▪ 700C, 100 % R.H. 7.8**

**▪ -200C 0.04**

**ASTM D2842 Water Absorption (% volume) 0.7**

**(96-hrs. immersion)**

**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. 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.**

**Polarfoam™ PF7610-0-EXP.**

**LIQUID COMPONENTS PROPERTIES**

**PROPERTY ISOCYANATE RESIN**

**Colour Brown Greenish @ bluish**

**Viscosity @ 25oC 150-250 cps 150-250 cps**

**Specific gravity 1.20-1.24 1.17-19**

**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 used :Graco H25, AP gun, #AR5252 chamber**

**Components A& B mixing temperature :420C (1080F)**

**Components A & B dynamic pressure :5516-5860 kPa (800-850psi)**

**Ambient temperature :200C (680F)**

**Number of passes :2**

**Thickness per pass :35 mm (1 3/8 ”)/25 mm (1”)**

**Substrate :PE board**

**REACTIVITY PROFILE**

**Cream time Gel time Tack free time End of rise**

**0-1 sec. 3-4 secs. 5-6 secs. 5-6 sec.**

**RECOMMENDED PROCESSING CONDITIONS**

**Fixed mixing components ratio, A&B, volume : 1/1**

**A&B mixing components temperature : 40-420C (104-1080F)**

**Minimum mixing dynamic pressure : 4480 kPa (650 psi)**

**Ideal Substrate & Ambient temperature : 15-320C (59-900F)**

**Curing temperature : >50C (410F)**

**Maximum thickness per pass : 2 inches**

**Maximum thickness of successive passes : 4 in.**

**Minimum cooling time period before applying**

**over 4 in. thick application : 4 hours**

**GENERAL INFORMATION:**

**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 1210C.**

**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.**

**Polarfoam™ PF-7610-0 2013 (October 2013)**