



DOW® STYROFOAM™ XPS Pipe Insulation Billets





Product Name: Dow® STYROFOAM[™] PIB.

Manufacturer: Dow Chemical Midland, MI. Sold through *Polyguard Products*, Ennis, TX.

Product Description: *Dow XPS PIB* is a closed-cell thermal plastic, void free, seamless foam insulation billet designed for mechanical fabrication design and manufacturing.

Application: STYROFOAM PIB insulation is designed for use on mechanical applications including but not limited to cold pipe, vessel and duct applications and is commonly applied on ammonia refrigeration pipe applications, cold storage piping, ice rinks, chilled water and glycol. It is suitable for the following pipe application categories, cryogenic, light cryogenic, cold, chilled, ambient, and mild hot. It is the responsibility of the designer to select the proper STYROFOAM thickness and specify the correct design criteria.

Advantages:

- Blue Brand Recognition
- Sold through reputable fabricator network
- Seamless billets / No glue lines in billet
- Low friability
- Excellent moisture resistance
- Low permeability
- Great long term R-Value



US Values: Properties & Test Method	XPS PIB
Thermal Resistance Per Inch ASTM C-518	.259 (75⁰F) .23(50⁰F) .17(0⁰F)
Compressive Strength ASTM D- 1621, psi, min	20
Density, ASTM D-1622 Lbs/cu ft.	1.6
Water Absorption, ASTM C-272 % by volume (24 hr.)	0.5
Water Vapor Permeance ASTM E-96, perms	1.0
Temperature Range	-300ºF to 165ºF
Coefficient of Linear Thermal Expansion, ASTM D696, in/in(F)	3.5 * 10 ⁻⁶
Surface Burning Charactoristics Flame /Smoke	5/165 up to 4" thick insulation
Complies with ASTM 578 Type III	

P.O. Box 755 Ennis, TX 75120 PH: (214) 515-5000 FX: (972) 875-9425

This information is based on our best knowledge, but POLYGUARD cannot guarantee the results to be obtained.



Polyguard is ISO 9001 certified since 1996.

www.polyguardproducts.com

www.reactivegel.com

Dimensions: 3 standard sizes:

- 7"x14"x108"
- 8″x16″x108″
- 10"x20"x108"

Custom lengths available upon request, contact *Polyguard* for details.

Installation: STYROFOAM[™] PIB is designed specifically for ease of fabrication. The billets are seamless and cell structure is designed for both shop fabrication and field adjustment. STYROFOAM can easily be cut and formed in the field with an insulation knife. Specialty Valves, fittings, and many other technical components should be manufactured by a fabricator. *Polyguard Products* has developed detailed installation guidelines to assist design and installation of STYROFOAM PIB.

Availability: STYROFOAM PIB are sold through *Polyguard* to an extensive fabricator network. For more information call Polyguard at 214-515-5000.

Technical Services: *Polyguard Products* can provide technical information and services pertaining to thickness calculations, design criteria & guidelines, installation recomendations, recommended system.

Typical Physical Properties: STYROFOAM PIB product exhibit typical physical properties indicated in above table when tested as represented.

Installation: *Polyguard Products* has developed detailed installation guidelines to assist design and installation of STYROFOAM PIB.

Environmental Data: STYROFOAM PIB is hydrochlorofluorocarbon (HCFC) free with zero ozone-depleting potential. STYROFOAM PIB is reusable in some applications.

Technical Data / Standards that Apply:

STYROFOAM PIB Insulation meets ASTM C-578 Standard Specification for Rigid Cellular Polystyrene Thermal Insulation. Applicable ASTM standards include:

C- 518 Standard test method for steady – state thermal transmission properties by means of heat flow meter apparatus

D-1621 Standard test method for compressive properties of thermal rigid cellular plastics

D-1622 Standard test method for density of thermal rigid cellular plastics.

E-96 Standard test method for water transmission of cellular plastics

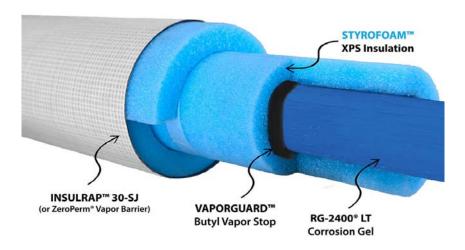
C-272 Standard test method for water absorption of cellular plastics

D-696 Standard test method for coefficient of linear thermal expansion of plastics between - 30C and +30C with a vitreous silica dilatometer.

E-84 Standard test method for flame spread / smoke developed using tunnel burn test.

Filing Systems:

- <u>www.polyguardmechanical.com</u>
- <u>www.polyguardproducts.com</u>



The Perfect Cold System

X:/Lit/Mech/2014/XPS data sheet.doc R2-27-14