

Data Sheet

GLT Products fabricates ISO-C1 Polyisocyanurate pipe insulation. Our Polyiso Pipe Insulation has superior physical characteristics, excellent water and moisture resistance, 2 lb/ft³ density, a high R-factor of 5.7, and zero ozone depletion potential (zero-ODP), making it a cost-effective and environmentally friendly choice. Suitable for service temperatures between -297°F and +300°F, Polyisocyanurate Pipe Insulation is well suited to a wide range of applications from chilled water pipe insulation to refrigeration insulation to cryogenic insulation.

Applications include:

- Insulated panels, including unfaced or structural insulated panels
- Commercial refrigeration insulation
- Warehouse insulation
- Walk-in cooler insulation and freezer insulation
- Refrigerated transportation containers
- Duct insulation
- Fabricated foam shape for low to mid-temperature mechanical insulation
- Chilled water pipe and equipment insulation
- Ammonia refrigerant pipe insulation
- Cryogenic insulation / LNG insulation
- Commercial HVAC insulation
- Tank insulation



TEMP RANGE: -297°F to 300°F

POLYISOCYANURATE ADVANTAGES

- **Greater dimensional stability over a wider service temperature range**
- **Low thermal conductivity**
- **Lightweight and easy to install**
- **Wide choice of adhesives and coatings can be used for bonding**
- **Excellent moisture resistance**

COMPLIANCE DATA

ASTM METHOD
D1622, C518, D1621, D1621, C273, D1623
D2856, C272, E96, D2126, E84, C450, C585-90 (2004)

FITTING TYPES

90° Elbows



45° Elbows



Tees



Pipe Covering



Segmented



Physical Properties

PHYSICAL PROPERTY MEASURED ⁽¹⁾	ASTM METH-OD ⁽²⁾	VALUE	PHYSICAL PROPERTY MEASURED	ASTM METHOD ⁽²⁾	VALUE
Density ⁽³⁾	D-1622	2.1 lb/cu ft	Dimensional Stability ^{(3) (5)}	D-2126	
Compressive Strength ⁽³⁾	D-1621		@ 158°F/97%RH, 7 Days	Volume	Less Than +2.0%
Parallel to rise		26 lbs/sq in		Length	Less Than +1.0%
Perpendicular to rise	T	29 lbs/sq in	@ 212°F, 7 Days	Volume	Less Than +1.0%
Tensile Strength	D-1623	33 lbs/sq in		Length	Less Than +0.6%
Flexural Strength	C-203	54 lbs/sq in	@ -40°F, 7 Days	Volume	Less Than +0.1%
Flexural Modulus	C-203	864 lbs/sq in		Length	Less Than +0.1%
Shear Strength	C-273	27 lbs/sq in	Water Absorption	C-272	0.04%
Shear Modulus	C-273	346 lbs/sq in	Water Vapor Permeance	E-96	1.65 perm-inch
			Service Temperature ⁽⁴⁾ °F(°C)		-297 to +300 (-183 to +149)
Thermal Conductivity	C-518		Surface Burning Characteristics ⁽⁶⁾		
10 days K-Factor	@1"	0.15 initial		UL	FM
75°F Mean Temp K- Factor	@1"	0.176 aged	Flame spread @ 4"	E-84	25 25
Thermal Resistance R-Factor	@1"	5.7 aged	Smoke density @ 4"	E-84	195 130
Closed Cell Content	D-2856	Greater than 95%	Hot Surface	C-411	Pass

⁽¹⁾ All properties are measured at 70°F – 75°+ unless otherwise indicated and all test values from independent certified testing laboratories.

⁽²⁾ These are nominal values obtained from representative product samples, and are subject to normal manufacturing variances.

⁽³⁾ Average value through the foam cross section.

⁽⁴⁾ Above 300°F, discoloration and charring will occur, resulting in an increased K-Factor in the discolored area.

⁽⁵⁾ Frequent and severe thermal cycling can produce dimensional changes significantly greater than those listed here. Special design considerations must be made in systems subject to severe cycling.

⁽⁶⁾ This numerical flame spread data is not intended to reflect hazards presented by this or any other material under actual fire conditions.

For more information on GLT Products, please call toll-free at 800.874.1748 or visit us online at www.gltproducts.com.



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