



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

GLT Fabricators line of fabricated ISO-C1 Polyisocyanurate pipe insulation has superior physical characteristics, excellent water and moisture resistance, 2 lb/ft³ density, high R-factor of 5.7, and zero ozone depletion potential (zero-ODP). This makes 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

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 METHOD ⁽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.