Product Information

TRYMER™ 2000 XP Meets 25/50*

ITW Insulation Systems
TRYMER™ PIR insulation

TRYMER™ 2000 XP Polyisocyanurate Insulation

TRYMER™ 2000 XP insulation is a polyurethane modified polyisocyanurate cellular plastic. The rigid insulation is supplied in the form of bunstock for fabrication into sheets, pipe shells, tank and vessel coverings, and other shapes for a variety of thermal insulation applications.

TRYMER™ 2000 XP insulation features improved dimensional stability over a wider range of temperatures than standard polyurethane insulation.

TRYMER™ insulation is not a known nutrient source for mold and mildew.

Applications

TRYMER™ 2000 XP insulation is suitable for applications that require a Flame Spread Index of 25 or less and Smoke Developed Index of 450 (non-plenum) and 25/50 or less (plenum inside a commercial building) when tested as per ASTM E84. It can be used within the service temperature range of -297°F to 300°F (-183°C to 149°C). Typical applications for TRYMER™ 2000 XP insulation include:

- industrial pipe insulation, including elbows and fittings
- commercial chilled water insulation
- tank and vessel insulation
- core material for architectural and structural panels
- insulation for shipping containers, trucks or railcars
- core material for factory built panellized constructions
- flat or tapered board stock for roof insulation

ITW can provide general guidelines and recommendations for TRYMER™ 2000 XP insulation. For additional information, visit www.itwinsulation.com, call 1-800-231-1024 or contact your regional ITW representative.

SIZE

Height:	24" (61 cm)
Width:	48" (122 cm)
Length:	36" (91 cm)
	96" (244 cm)
	108" (274 cm)

Custom lengths are also available. Contact your regional ITW representative for details.

PHYSICAL PROPERTIES

TRYMER™ 2000 XP insulation exhibits the properties and characteristics indicated in Table 1 when tested as represented. Consultation with local code officials and design engineers/ specifiers is recommended before application.

As with all cellular polymers, TRYMER™ 2000 XP insulation will degrade upon prolonged exposure to sunlight. A covering to block ultraviolet radiation must be used to help prevent degradation. Other coverings to protect the insulation from the elements may be required.

ENVIRONMENTAL DATA

TRYMER™ 2000 XP insulation is specifically formulated to provide excellent thermal insulation properties without the use of chlorofluorocarbon (CFC) or hydrochlorofluorocarbon (HCFC) blowing agents. In compliance with the Montreal Protocol and the Clean Air Act, TRYMER™ 2000 XP insulation is manufactured with hydrocarbon blowing agents, which have no ozone depletion potential.

SAFETY CONSIDERATIONS

TRYMER™ 2000 XP insulation requires care in handling. All persons working with this material must know and follow the proper handling procedures. The current Material Safety Data Sheet (MSDS) and General Handling Recommendations for TRYMER™ contain information on the safe handling, storage and use of this material. For copies of these documents, visit the literature library at www.itwinsulation.com, call 1-800-231-1024 or contact your regional ITW representative.

Installation

TRYMER™ 2000 XP insulation is specifically formulated for easy fabrication into many shapes, such as pipe coverings, valve and fitting covers, and others to meet specific design needs. Because of the critical technical design aspects in many applications, ITW recommends contacting qualified designers to specify the total system. For more specific instructions, contact a regional ITW representative or access the literature library at www.itwinsulation.com.

Availability

TRYMER™ 2000 XP insulation is distributed through ITW's extensive Authorized Fabricator Network. For more information, call: 1-800-231-1024.

TRYMER 2000 XP Polyisocyanurate Insulation

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*At 1.0" thickness

Product Information

TRYMER™ 2000 XP complies with ASTM C591, Grade 2, Type IV

TABLE 1

Physical Properties of TRYMER™ 2000 XP Polyisocyanurate Insulation

Property[1] and Test Method[2]	Value
Density[3], ASTM D1622, lb/ft³ (kg/m³)	2.05 (32.8)
Compressive Strength[3], ASTM D1621, lb/in² (kPa)	
Parallel to rise – thickness	25 (172)
Perpendicular to rise – width	24 (165)
Perpendicular to rise – length	30 (207)
Compressive Modulus, ASTM D1621, lb/in² (kPa)	
Parallel to rise – thickness	650 (4,485)
Perpendicular to rise – width	475 (3,278)
Perpendicular to rise – length	600 (4,140)
Shear Strength, ASTM C273, lb/in² (kPa)	
Parallel and perpendicular, avg	15 (104)
Shear Modulus, ASTM C273, lb/in² (kPa)	
Parallel and perpendicular, avg	250 (1,725)
Tensile Strength, ASTM D1623, lb/in² (kPa)	
Parallel to rise – thickness	20 (138)
Flexural Modulus, ASTM C203, lb/in² (kPa)	
Parallel to rise	720 (4,968)
Flexural Strength, ASTM C203, lb/in² (kPa)	
Parallel to rise	33 (228)
k-factor, ASTM C518, Btu•in/hr•ft²•°F (W/m•°C)	
@ 75°F (24°C)	0.19 (0.027)
R-Value[4]/in., ASTM C518, hr•ft²•°F/Btu (m²•°C/W)	
@ 75°F (24°C)	5.3 (0.93)
Closed Cell Content, ASTM D6226, %, min.	90
Water Absorption, ASTM C272, 24-hr immersion, % by volume	<0.7

Property[1] and Test Method[2]	Value
Water Vapor Permeability, ASTM E96	
perm-inch (ng/Pa•s•m)	4 (5.8)
Dimensional Stability[3],[5], ASTM D2126	
At -40°F (-40°C), 7 days	
Length, % change	0.4
Volume, % change	0.6
At -10°F (-23°C), 7 days	
Length, % change	0.2
Volume, % change	0.2
At 158°F (70°C), 7 days	
Length, % change	1.5
Volume, % change	3.0
At 158°F (70°C)/97% R.H., 7 days	
Length, % change	1.6
Volume, % change	3.4
At 300°F (149°C), 7 days	
Length, % change	2.7
Volume, % change	4.5
Service Temperature[6], °F (°C)	-297 to +300 (-183 to +149)
Surface Burning Characteristics[7], ASTM E84	
Flame Spread	
1" through 6" (2.5 cm through 15 cm)	25
Smoke Developed	
Up to 1.0" (2.5 cm)	50
Up to 1.5" (3.75 cm)	55
2" through 6" (5 cm through 15 cm)	450
Color	Tan

(1) All properties are measured at 74° (23°C), unless otherwise indicated.
(2) Unless otherwise indicated, data shown are typical values obtained from representative production samples. This data may be used as a guide for design purposes, but should not be construed as specifications. For property ranges and specifications, consult your ITW representative.
(3) Average value through insulation cross section.
(4) R means resistance to heat flow. The higher the R-value, the greater the insulating power.
(5) Frequent and severe thermal cycling can produce dimensional changes significantly greater than those stated here. Special design consideration must be made in systems that cycle frequently.
(6) Above 300°F, discoloration and charring will occur, resulting in an increased k-factor in the discolored area.
(7) This numerical flame spread data is not intended to reflect hazards presented by this or any other material under actual fire conditions.

- **For Technical Information: 1-800-231-1024**
- **For Sales Information: 1-800-231-1024**
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