

DESCRIPTION

TRYMER® Supercel is a closed-cell rigid phenolic foam insulation. This rigid insulation is supplied in the form of large buns for fabrication into pipe shells, curved segments, sheets, tank and vessel coverings, and other shapes for a variety of thermal insulation applications.

The buns will yield these dimensions:

- 41" (1041 mm) tall (rise direction)
- 36.5" (927 mm) long (length direction)
- 26" (660 mm) wide (width direction)

APPLICATIONS

TRYMER Supercel Phenolic Insulation has a very low (good) thermal conductivity and an exceptionally low flammability. TRYMER Supercel can be used for pipe temperatures of -297°F to +257°F (-183°C to 125°C).

TRYMER Supercel has ASTM E84 flame spread/smoke developed indices of ≤25/50 making it ideal for use in applications which require this stringent performance including pipe insulation located in air plenums of commercial buildings. For pipe insulation located outside of air plenums, JM recommends the use of TRYMER 2000XP PIR Insulation which meets flame spread/smoke developed indices of ≤25/450 which is typically required for pipe insulation in non-plenum locations of a commercial building.

Consultation with design engineers/specifiers and possibly local code officials is recommended before installation.

FABRICATION

TRYMER Supercel 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. Pipe shells should be cut so that the longitudinal dimension of the pipe shell comes from the 36.5" long (length) direction of the bun.

PHYSICAL PROPERTIES

TRYMER Supercel Phenolic Insulation has the properties and characteristics indicated in the table on the next page when tested as shown. As with all cellular polymers, TRYMER Supercel Insulation will degrade upon prolonged exposure to sunlight. A covering to block ultra-violet radiation and to protect the insulation from the elements or physical abuse must be used to help prevent degradation in outdoor and most indoor applications.

ENVIRONMENTAL DATA

TRYMER Supercel Insulation is specifically formulated to provide excellent thermal insulating performance without the use of chlorofluorocarbon (CFC) or hydrochlorofluorocarbon (HCFC) blowing agents. In compliance with the Montreal Protocol and the Clean Air Act, TRYMER Supercel Insulation is manufactured with hydrocarbon blowing agents, which have no ozone depletion potential (0 ODP).

JM recommends that all specifications require the insulation to have a 0 ODP.

SAFETY CONSIDERATIONS

TRYMER Supercel 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.JM.com, call 1-800-231-1024 or contact your regional JM representative.

INSTALLATION

Because of the critical design aspects present in many applications, JM recommends that qualified engineers specify the total system. JM offers an installation guideline for Trymer Supercel Phenolic Insulation in chilled water mechanical insulation applications. This can be found in the mechanical insulation library at www.jm.com.

TRYMER® SUPERCEL PHENOLIC
2.5 PCF DENSITY PHENOLIC FOAM INSULATION

TRYMER SUPERCEL PHENOLIC INSULATION

Property	Test Method	
Standard Specification	ASTM C1126, Type III, Grade 1	Complies
Color		Gray
Density, min.	ASTM D1622	2.50 lb/ft ³ (40 kg/m ³)
Temperature Limits		-297°F to +257°F (-183°C to +125°C)
Compressive Strength	ASTM C1621, Proc. A	Parallel to Rise: 32.6 lb/in ² (225 kPa) Length: 27.7 lb/in ² (191 kPa) Width: 29.5 lb/in ² (203 kPa)
Compressive Modulus	ASTM C1621, Proc. A	Parallel to Rise: 1078 lb/in ² (7430 kPa) Length: 948 lb/in ² (6540 kPa) Width: 843 lb/in ² (5810 kPa)
Thermal Conductivity, max. Btu•in/hr•ft ² •°F (W/m•°C)	EN 12667 (equivalent to ASTM C518)	@50°F Mean Temp: 0.18 (0.026) @75°F Mean Temp: 0.18 (0.026)
Dimensional Stability after Thermal & Humid Aging for 1 week, % linear change	ASTM D2126	-40°F (-40°C) and ambient RH: -0.35% 158°F (70°C) and 97% RH: +0.70% 257°F (125°C) and ambient RH: -1.56%
Water Absorption	ASTM C209	0.87% by volume
Water Vapor Permeability	ASTM E96	2.14 perms (3.10 ng/Pa-s-m)
Closed Cell Content, Min	ASTM D6226	96.6%
Surface Burning Characteristics @ 3" Thick	ASTM E84	≤25 Flame Spread ≤50 Smoke Developed

TRYMER™ Supercel Phenolic Insulation meets the requirements of ASTM C1126 Type III, Standard Specification for Faced or Unfaced Rigid Cellular Phenolic Thermal Insulation. 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. This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of JM.



717 17th St.
Denver, CO 80202
(800) 866-3234
JM.com

Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The physical and chemical properties of the product listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Regional Sales Office nearest you for current information.

All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville thermal insulation and systems, visit www.jm.com/terms-conditions or call (800)654-3103.