



FOAMSULATE ECO TM

Medium Density Closed Cell Polyurethane Spray Foam System

CCMC 13527-L

DESCRIPTION

Premium Spray Products' FOAMSULATE-ECOTM system is a true "Green" spray applied rigid polyurethane foam that contains rapidly renewable Soya, Corn, Sugar and Castor based polyols as well as recycled products derived from pre and post consumer products. FOAMSULATE-ECO is truly Green in nature, chemistry and performance.

FOAMSULATE-ECO meets the CAN/ULC 705.1 requirements and has a listing number of CCMC 13527-L. FOAMSULATE-ECO has a distinct colour of Georgian Pine green.

FOAMSULATE-ECO utilizes, zero ozone-depleting substances and is designed for use in commercial and residential construction applications that involve the National Building Code of Canada. Foamsulate-Eco is applied by licensed applicators that follow the CAN/ULC S705.2 program. Premium Spray Products Canada utilizes Exova to administer the site quality assurance plan.

FOAMSULATE-ECO provides excellent insulation while also meeting requirements as a vapour barrier and air barrier. Other benefits include reductions in noise, dust, pollen, pest infiltrations and significant improvements on structural racking strength of wall assemblies.

FOAMSULATE -ECOTM is designed for the Canadian climate and is available in three reactivities including winter, spring/fall and summer.

ADVANTAGES

- *High R-value*
- *High Yield*
- *Air Barrier*
- *Vapour Barrier*
- *Low Viscosity Resin 600 cps*
- *Ease of Application*
- *High closed cell content*
- *Zero ODP*
- *Seamless Insulation*

For proper use of FOAMSULATETM-ECO spray foam, please refer to the HTS Foamsulate Installer Manual and the CAN/ULCS705.2 Rigid Polyurethane Foam Medium Density Application standard.

TYPICAL PHYSICAL PROPERTIES

Property	CAN/ULC 705.1 Requirements	Metric Value (Imperial) Foamsulate-Eco values	Test Method
Core Density	≥28 kg/m ³	37 (2.3)	ASTM D1622
Compressive Strength	≥170 kPa	282 (41 psi)	ASTM D1621
Tensile Strength	≥200 kPa	406 (59 psi)	ASTM D1623
Dimensional Stability -	At -20C	≥-1	ASTM 2126
	At 80C	≥-1; ≤+8	
	At 70C, 97% ± 3% RH	≤+14	
Open Cell Content	≤8 % by volume	5	ASTM D2856
Water Absorption	≤4 % by volume	0.3	ASTM D2842
Water Vapour Permeance	≤60 ng/(PAsm ²)	58	ASTM E96
Air Permeance	≤0.02 L/s @ 75 Pa	0.0005	
Flame Spread	≤500	97	CAN/ULC-S102
	≤500	295	CAN/ULC-S127
Volatile Organic Compounds (VOC)*	Declare	24 hours	CAN/ULC-S774

**Independent lab at SRC conducting VOC testing for Foamsulate-Eco indicated a time to occupancy of 1 hour.
CCMC minimum allowable limit for VOC/occupancy is 24 hours with 0.3 air changes per hour.*

Long Term Thermal Resistance (test method CAN/ULC-S770)

Thickness mm (inches)	R Value per inch	R Value total at thickness	RSI
	°F · ft ² · hr / BTU · in	°F · ft ² · hr / BTU · in	K·m ² /W
50 mm (2 inches)	5.47	10.94	1.90
75 mm (3 inches)	5.60	16.8	2.91
100 mm (4 inches)	5.81	23.24	4.03

*LTTR is a predicted value to simulate a 5 year aged specimen at various thicknesses. LTTR still utilize the old style R value test and is in PSP Canada's opinion not an accurate measurement of insulation and field performance of any spray foam.

APPLICATION INFORMATION

STORAGE AND USE OF CHEMICALS

Cold chemicals can cause poor mixing, pump cavitations, or other process problems due to higher viscosity at lower temperatures. Condition the liquid in the drums to 60-85° F prior to use, do not exceed 90° F. Do not store in direct sunlight. Keep drums tightly closed when not in use. Shelf life is six months from date of manufacture.

SAFE HANDLING OF LIQUID COMPONENTS

When removing bungs from containers use caution, contents may be under pressure. Loosen bung first and let any built up gas escape before completely removing. Avoid prolonged breathing of vapors. All individuals in contact with Foamsulate-Eco and Foamsulate Iso should have access and familiarize themselves to the MSDS. Kit sizes are 454 kgs (227kg A and 227kg B).

EQUIPMENT AND COMPONENT SETTINGS

Polyurethane foam systems should be processed through 1:1 fixed ratio spray equipment. FOAMSULATE-ECO B-side (white drum) is connected to the resin pump and the FOAMSULATE A-side (black or red drum) is connected to the isocyanate pump. The pre-heater and hose temperature should be set between 100-120° F and able to maintain ±5° F to the spray gun. Proportioner pumps must be able to maintain 1000 psi output during spray.

APPLICATION GUIDELINES

15-50 mm is the required thickness per pass. Allow adequate time between each pass to allow for cooling. Multiple passes can be applied to reach the desired thickness and R-value. Exterior applications must be protected from UV light. When in doubt follow CAN/ULC S705.2 guidelines for application limitations.

CODE COMPLIANCE

Building codes require the use of an approved thermal barrier on exposed foam insulations in occupied spaces such as ½ inch gypsum board. Refer to local building codes for details. Contact Premium Spray Products for specific alternate approvals for FOAMSULATE-ECO.

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