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## TECHNICAL DATA SHEET

### DESCRIPTION

BOREAL NATURE is a TYPE 2 spray applied insulation polyurethane foam system, medium density specially formulated without any ozone depletion substances (Zero ODS). This system is formulated based on renewable substances, recycled products and is blown with lavender water. This lavender water generates a pleasant and fresh odour during the application. BOREAL NATURE is lime green in colour.

BOREAL NATURE has been tested by an independent laboratory and accredited by the CCMC. It surpasses the CAN/ULC S705.1 requirements including amendments 1, 2 and 3 (*Standard for Thermal Insulation-Spray Applied Rigid Polyurethane Foam, Medium Density, Material Specification* standard).

BOREAL NATURE must be applied by licensed installers under the application standard CAN/ULC S705.2.

CCMC#14025-L

BOREAL NATURE has been tested as a Radon Mitigation System as evaluated by CCMC under the Report CCMC 14073-R

### TYPICAL PHYSICAL PROPERTIES

PHYSICAL PROPERTIES	STANDARD	RESULT
Core Density	ASTM D1622	32,6 kg/m <sup>3</sup> (2,03 lb/ft <sup>3</sup> )
Compressive Strength	ASTM D1621	190 kPa (27,6 psi)
Tensile Strength	ASTM D1623	283 kpa (41.0 psi)
Water Vapor Permeance	ASTM E96	45 ng(Pa.s.m <sup>2</sup> )
Surface Burning (Flame Spread Index)	CAN/ULC S102 (S127)	375
Smoke Develop Index	CAN/ULC S102	300
Initial Thermal Resistance (50 mm)	ASTM C518	2.43 k*m <sup>2</sup> /W (R 7,01 / inch)
Long Term Thermal Resistance.	CAN/ULC S770	2.03 k*m <sup>2</sup> /W Type 2 (The highest) (R 6/inch)
Air Permeance @ 75 Pa	CCMC 07273	0,0006 L/s.m <sup>2</sup>
Volatile Organic Emissions – Recommended Time to occupancy.	CAN/ULC S774	1 DAY
Open Cell Content	ASTM D2856	0.73 %
Water Absorption (volume)	ASTM D2842	1,74%
Dimensional Stability	ASTM D2126 (28 days) -20°C, Ambient R.H.) 80°C, ambient R.H. 70°C, 97% (+-3% R.H.)	-0,60% 3,70% 4,10%

### LONG-TERM THERMAL RESISTANCE

Thickness Mm (inches)	R-VALUE (ft <sup>2</sup> *hr*°F/BTU)	RSI (m <sup>2</sup> *K/W)
50.8 (2.00)	11.8	2.06
63.5 (2.50)	14.9	2.62
76.2 (3.00)	18.1	3.19
88.9 (3.50)	21.5	3.79
102.0 (4.00)	24.6	4.33
127.0 (5.00)	31.1	5.48
152.0 (6.00)	37.1	6.53
177.8 (7.00)	43.4	7.64
203.2 (8.00)	49.9	8.79

## ADDITIONAL INFORMATION

- ✓ Maximum per pass thickness is 51mm (2 inches). Spraying thicker can result in spontaneous combustion and poor overall spray foam quality.
- ✓ Internal temperature of installed pass must be 25°C before installing subsequent passes. Maximum thickness during 24 hours period is 203 mm (8 inches).
- ✓ Like all spray foam products, Genyk “Boreal” is combustible. An approved thermal barrier must be installed in accordance with applicable building codes.
- ✓ The service temperature of Genyk “Boreal” is between -60°C and 80°C.
- ✓ Recommended storage temperature of materials is from 10 to 25°C (50 to 77°F).

## INSTALLATION GUIDELINES

BOREAL NATURE	Ambient Temperatures	Spraying Temperatures	Minimum Spraying Pressure
SUMMER	10°C to 35°C (50 to 95°F)	35 – 41°C (95-105°F)	5516 kPa (800 psi)
INTERMEDIATE	0°C to 15°C (32 to 59°F)	35 - 45°C (95-113°F)	5516 kPa (800 psi)
WINTER	-10°C to 5°C (14 to 41°F)	38 – 50°C (100-122°F)	5516 kPa (800 psi)

## COMPONENT PRODUCT SPECIFICATIONS

PROPERTY	POLYMERIC ISOCYANATE A-2732	BOREAL NATURE RESIN
COLOUR	Brown liquid	Dark liquid
Viscosity at 25°C	150-250 cps	200-400 cps
Specific gravity	1.22 – 1.25	1.17 – 1.21
Shelf life	12 months	6 months

## REACTIVITY PROFILE

CREAM TIME	GEL TIME	RISE TIME
0 to 1 second	2 to 3 seconds	4 to 5 seconds

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