

TECHNICAL DATA SHEET

BOREAL NATURE elite is a medium density spray-applied rigid polyurethane foam insulate, specially formulated without any ozone depletion substances (Zero ODS). BOREAL Nature elite has a global warming potential (GWP) of 1, which is 99.9% lower than current HFCs used in this industry. This system is formulated with renewable substances, recycled products and lavender extracts. The lavender extracts generate a pleasant and fresh odour during the application. BOREAL NATURE elite is lime green in colour.



BOREAL NATURE elite has been tested by an independent laboratory and accredited by CCMC. It surpasses the CAN/ULC S705.1-15 requirements (Standard for thermal insulation – Spray applied rigid polyurethane foam, medium density – material specification).

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

PHYSICAL PROPERTIES – CCMC # 14140-L

PHYSICAL PROPERTIES	REQUIREMENTS		STANDARD	VALUE
	Min.	Max.		
Core Density	28.0 kg/m ³	---	ASTM D1622	32.0 kg/m ³ (2.0 lb/pi ³)
Compressive Strength	170 kPa	---	ASTM D1621	228 kPa (33.1 psi)
Tensile Strength	200 kPa	---	ASTM D1623	205 kPa (29.7 psi)
Water Vapour permeance (50mm thickness sample)	60 ng(Pa.s.m ²)		ASTM E96 (procédure A)	34 ng(Pa.s.m ²)
Surface Burning (Flame Spread Index)	---	500	CAN/ULC S102-10	30
Smoke Develop Index	---	500	CAN/ULC S127-14	285
Fungi Resistance	No Growth	---	ASTM C1338	No Growth
Long Term Thermal Resistance				
Thickness 25 mm	DECLARE	---	CAN/ULC- S770-09	0.93 RSI
Thickness 50 mm	1.80 m ² *K/W	---		1.96 RSI
Thickness 75 mm	DECLARE	---		2.93 RSI
Thickness 100 mm	DECLARE	---		4.12 RSI
Air Permeance	--	0.02	ASTM E2178	0.0008 L/(s.m ²)
Volatile Organic Emissions – Recommended Time to Occupancy	1 day	30 days	CAN/ULC S774	1 day
Open Cell Content	---	10.0	ASTM D6226 (procedure 2)	2.8 %
Water Absorption (volume)	---	4.0	ASTM D2842 (procedure A)	1.6 %
Dimensional Stability			ASTM D2126 (28 days)	
	-2	5	-20°C, Ambient R.H.	-1 %
	-2	8	80°C, Ambient R.H.	+2 %
	-2	14	70°C, 97% (+-3% R.H.)	+13 %

PHYSICAL PROPERTIES – Additional Test

Long Term Thermal Resistance				
Thickness 25 mm	1.80 m ² *K/W	---	CAN/ULC- S770-03	2.07 RSI
Thickness 50 mm	DECLARE	---		3.22 RSI

COMPONENT PROPERTIES		
Propreties	ISOCYANATE A-2732	BOREAL NATURE <small>elite</small>
Appearance	Brown Liquid	Green Liquid
Viscosity @ 25°C	150 – 250 cps	200 – 400 cps
Spécific Gravity @ 25°C	1.24	1.17 – 1.21
Shelf Life	12 months	6 months
Storage Temperature	10 – 38°C / 50 -100°F	10 – 25°C / 50 -77°F
Mixing Ratio (volume)	100	100

REACTIVITY PROFILE (Graco E30 – AF Gun – AR4242 - A&B 105°F / 1000psi)	
Cream Time (seconds)	1 - 2
Gel Time (seconds)	2 - 3
Rise Time (seconds)	4 – 5

RECOMENDED PROCESSING CONDITIONS			
BOREAL NATURE <small>elite</small>	Temperatures (Ambient & Substrate)	Spraying Temperatures	Minimum Spraying Pressure
Summer	0°C to +35°C (32 to 95°F)	35 – 46°C (95-115°F)	5516 kPa (800 psi)
Winter	-10°C to +15°C (14 to 59°F)	38 – 50°C (100 – 125°F)	5516 kPa (800 psi)

Processing conditions can vary depending on temperature, humidity, substrate, equipment and other factors. It is the applicator’s responsibility to process and apply BOREAL NATURE elite within specification.

ADDITIONAL INFORMATION
<p>Maximum per pass thickness is 51mm (2 inches). Spraying thicker can result in spontaneous combustion and poor overall spray foam quality. Respect recommendations of CAN/ULC S705.2.</p> <p>Like all spray foam products, Genyk “Boreal” is combustible. An approved thermal barrier must be installed in accordance with applicable building codes.</p> <p>The service temperature of Genyk “Boreal” is between -60°C and 80°C.</p> <p>Recommended storage temperature of materials is from 10 to 25°C (50 to 77°F).</p>

HEALTH AND PERSONNAL PROTECTION
<p>Before handling these chemicals, please consult the Material Safety Data Sheets for the two components. Material Safety Data sheets on product components are available from Genyk Inc.</p>

Genyk Inc believes that the information in this technical data sheet is an accurate description of the typical uses of the product. Genyk Inc, however, disclaims any liability for incidental or consequential damages, which may result from the use of the product that are beyond its control. Therefore, it is the user’s responsibility to thoroughly test the product in their particular application to determine its performance, efficiency and safety. Nothing contained herein is to be considered as permission or a recommendation to infringe any patent or any other intellectual property right.