

BUILDING PRODUCTS LISTING PROGRAM

Customer: BASF Corporation
Class: Thermal Insulation Canada
Location: Wyandotte, Michigan
Website: www.neopor.basf.us

Listing No. B1055-2
Project No. B1055-2 Edition 3

Effective Date: December 20, 2012
Last Revised Date: August 10, 2016
Expires: N/A

CAN/ULC-S701 *“Thermal Insulation, Polystyrene, Boards and Pipe Coverings”.*
CAN/ULC-S102.2 *“Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies”.*
ASTM C518 *“Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus”.*

Product: NEOPOR® F2200, NEOPOR® F2300, NEOPOR® F2400, NEOPOR® F5300, NEOPOR® F5300 Plus Expandable Polystyrene Beads

Markings: Products are marked in a permanent manner where it is readily visible after installation with the following:

- a) Manufacturer’s name and trademark
- b) Bead Designation
- c) Charge Number
- d) QAI logo with ‘c’ and ‘us’ identifier
- e) QAI file Number: B1055

Labels are applied to octabins delivered to Expanded Polystyrene Molders for the manufacture of rigid thermal EPS insulation products.

Models / Ratings: The following outlines BASF NEOPOR® specifications.

Physical Properties for NEOPOR® F2200, NEOPOR® F2300, NEOPOR® F2400, NEOPOR® F5300, NEOPOR® F5300 Plus in accordance with CAN/ULC-S701.



Property	Bead Grade(s) F5300, F5300 Plus, F2200, F2300, F2400	Bead Grade(s) F5300, F5300 Plus, F2200, F2300, F2400	Bead Grade(s) F5300, F5300 Plus, F2200, F2300, F2400
	Type 1	Type 2	Type 3
Thermal Resistance Minimum at 25 mm (1 inch) Thickness	See Table Below	See Table Below	See Table Below
Water Vapour Permeance Maximum at 25 mm Thickness (Ng/Pa*s*m²)	300	200	130
Dimensional Stability Maximum Linear Change (%)	1.5	1.5	1.5
Flexural Strength Minimum (kPa)	170	240	300
Water Absorption By Volume Maximum (%)	6.0	4.0	2.0
Compressive Strength Minimum at 10% Deformation (kPa)	70	110	140
Limiting Oxygen Index Minimum (%)	24	24	24

Surface Burning Characteristics for NEOPOR® F2200, NEOPOR® F2300, NEOPOR® F2400, NEOPOR® F5300, NEOPOR® F5300 Plus in accordance with CAN/ULC-S102.2

Bead Grade(s)	Flame Spread Index Maximum	Smoke Developed Index Maximum	Thickness Maximum	Density Maximum
NEOPOR® F2200, F2300, F2400, F5300, F5300 Plus	230	> 500	102 mm (4 inches)	32 kg/m ³ (2.0 lbs/ft ³)

Thermal Resistance Properties for NEOPOR® F2200, NEOPOR® F2300, NEOPOR® F2400, NEOPOR® F5300 in accordance with ASTM C518



Bead Grade(s) and EPS Type	Minimum Density kg/m ³ (lbs/ft ³)	Thermal Resistance @ 1 inch (25 mm) Thickness at 75°F (23°C) Mean Temperature K*m ² /W (F*ft ² *h/Btu)	Thermal Resistance @ 25 mm (1 inch) Thickness at 4°C (40°F) Mean Temperature K*m ² /W (F*ft ² *h/Btu)
NEOPOR® F5300 Type 1	15 (0.95)	0.76 (4.3)	0.83 (4.7)
NEOPOR® F5300, F2200, F2300, F2400 Type 1	18 (1.15)	0.79 (4.5)	0.84 (4.8)
NEOPOR® F5300, F2200, F2300, F2400 Type 2	22 (1.35)	0.79 (4.5)	0.86 (4.9)
NEOPOR® F5300, F2200, F2300, F2400 Type 2	23 (1.45)	0.81 (4.6)	0.86 (4.9)
NEOPOR® F5300, F2200, F2300, F2400 Type 3	29 (1.80)	0.81 (4.6)	0.86 (4.9)

Thermal Resistance Properties for NEOPOR® F5300 Plus in accordance with ASTM C518

Bead Grade(s) and EPS Type	Minimum Density kg/m ³ (lb/ft ³)	Thermal Resistance @ 1 inch (25 mm) Thickness at 75°F (23°C) Mean Temperature K*m ² /W (F*ft ² *h/Btu)	Thermal Resistance @ 1-1/6 inch (27mm) Thickness at 75°F (23°C) Mean Temperature K*m ² /W (F*ft ² *h/Btu)
NEOPOR® F5300 Plus Type 1	15 (0.95)	0.83 (4.7)	0.88 (5.0)
NEOPOR® F5300 Plus Type 1	18 (1.15)	0.83 (4.7)	0.88 (5.0)

NEOPOR® F5300 Plus Type 2	22 (1.35)	0.83 (4.7)	0.88 (5.0)
NEOPOR® F5300 Plus Type 2	23 (1.45)	0.83 (4.7)	0.88 (5.0)
NEOPOR® F5300 Plus Type 3	29 (1.80)	0.83 (4.7)	0.88 (5.0)

Notes:

Final acceptance of the product in the intended application is to be determined by the authority having jurisdiction.

Use, on product and packaging labeling, of the increased R-values noted above require qualification at the EPS Molder location by QAI Laboratories under the BASF Brand Marketing Program.

The materials, products or systems listed herein have been qualified to bear the QAI Listing Mark under the conditions stated with each Listing. Only those products bearing the QAI Listing Mark are considered to be listed by QAI. No warrantee is expressed or implied, and no guarantee is provided that any jurisdictional authority will accept the Listing found herein. The appropriate authorities should be contacted regarding the acceptability of any given Listing. Visit the QAI Online Listing Directory located at www.qai.org for the most up to date version of this Listing and to validate that this QAI Listing is active. Questions regarding this listing may be directed to info@qai.org. Please include the listing number in the request.
