



Environmental Product Declaration Summary

Owner of the Declaration	BASF Corporation
EPD Program Operator	NSF Certification, LLC
PCR Program Operator	UL Environment
Declaration Number	EPD10152
Issue Date	November 7, 2018
Period of Validity	5 years

Product's Intended application and use and markets of applicability	The performance properties of Neopor® Plus Graphite Polystyrene (GPS) insulation boards make them suitable for use in many applications. The product described in this document is used in applications such as wall insulation, pitched roof insulation, External Insulation and Finish System (EIFS), cavity wall insulation, ceiling insulation, insulation for building equipment and industrial installations.
Reference PCR's	ISO 21930:2017 and EN 15804:2012-04 serve as the core PCR along with Product Category Rules for Building-Related Products and Services; Part A (Standard 10010 version 3.1 4th edition, May 2, 2018) and Product Category Rule (PCR) Guidance for Building-Related Products and Services; Part B: Building Thermal Insulation EPD Requirements UL 10010-1 (2nd edition, April 10, 2018)
Product RSL	75 years
EPD Type	Product specific
Range of data set variability	Manufacturer-average
EPD Scope	Cradle to Gate (installation) with options (end of life)
Years of reported Mfg primary data	1 year
LCA Software & Version number	Gabi ts 8.5.0.79
LCI Database & Version number	Gabi ts 8.5.0.79
LCIA Methodology & Version number	TRACI v2.1 and CML 2001 (2016)
Functional / Declared Unit	1m² of Type I Neopor® insulation at RSI of 1 The declared unit calculated in the LCA is in conformance with EN 15804 and the relevant subcategory PCR (Part B) for Building Envelope Thermal Insulation and is defined as 1 m ² of installed Neopor® Plus Graphite Polystyrene (GPS) Type I insulation material with a thickness that gives an average thermal resistance (RSI) of 1 m ² *K/W (5.68 ft ² *hr.*F/BTU per inch) with a building service life of 75 years (packaging included). Relative to this declared unit, the mass of the described insulation board is 0.433 kg (0.98 lbs.).



Global Warming Potential



Ozone Depletion Potential



Acidification Potential



Eutrophication Potential



Abiotic Depletion Potential of Non-renewable (fossil) energy resources



Formation potential of tropospheric ozone photochemical oxidants



Fresh Water use

TRACI v2.1	1.85E+00	5.10E-10	6.33E-3	4.80E-4	6.82E+00	1.46E-01	6.35E+00
Units	(kg CO ₂ equiv)	kg CFC-11 eq.	kg SO ₂ -eq	kg N-eq.	MJ, LHV	kg O ₃ -eq.	Liters



NEOPOR® PLUS GPS TECHNICAL PROPERTIES

Neopor Plus GPS rigid foam is today's energy-efficient and cost-effective insulation solution for architects, builders and contractors.

Property	Unit	Neopor Plus GPS			
ASTM C578 Classification		Type I	Type VIII	Type II	Type IX
Compressive Resistance	at yield of 10% deformation in psi (min)	10.0	14.0	15.0	25.0
Thermal Resistance (R-value)	°F · ft ² · h/BTU (°C · m ² /W) at 75°F	4.7	4.7	4.7	4.7
	°F · ft ² · h/BTU (°C · m ² /W) at 40°F	5.0	5.0	5.0	5.0
Water Vapor Permeance	Max perm (ng/Pa · s · m ²)	4.0	3.1	3.1	2.5
Water Absorption by Total Immersion	Max volume % absorbed	1.1	1.1	1.1	1.1
Flexural Strength	psi	25.0	32.0	39.0	50.0
Density	lbs/ ft ³ (min)	0.90	1.15	1.35	1.80
Flame Spread	Index	5			
Smoke Development	Index	25			

Please note:

R means resistance to heat flow. The higher the R-value, the greater the insulating power. Ask your representative for the fact sheet on R-values. The technical and physical metrics provided in this table are reference values for insulation products made of Neopor Plus GPS. The values and properties may vary depending on how they are processed and produced. The R-value properties are based on 1 inch thickness. Water absorption rates typical when tested according to C272.

While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, they are provided for guidance only. Because many factors may affect processing or application/use, BASF recommends that the reader make tests to determine the suitability of a product for a particular purpose prior to use. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESCRIPTIONS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. In no case shall the descriptions, information, data or designs provided be considered a part of BASF's terms and conditions of sale. Further, the descriptions, designs, data and information furnished by BASF hereunder are given gratis and BASF assumes no obligation or liability for the descriptions, designs, data or information given or results obtained, all such being given and accepted at the reader's risk.

Contact:

BASF Corporation

1609 Biddle Avenue
Wyandotte, Michigan 48192
(877) 297-3322