

HPD UNIQUE IDENTIFIER: 23630

CLASSIFICATION: 07 21 13.13 Foam Board Insulation

PRODUCT DESCRIPTION: Neopor® GPS Plus is a graphite-enhanced rigid insulation material made from BASF's Neopor® F 5300 Plus expandable polystyrene resin. By using a polymeric flame retardant (PolymerFR), BASF continues to ensure the availability of eco-efficient thermal insulation solutions for sustainable construction.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format <input type="radio"/> Nested Materials Method <input checked="" type="radio"/> Basic Method	Threshold level <input checked="" type="radio"/> 100 ppm <input type="radio"/> 1,000 ppm <input type="radio"/> Per GHS SDS <input type="radio"/> Other	Residuals/Impurities <input checked="" type="radio"/> Considered <input type="radio"/> Partially Considered <input type="radio"/> Not Considered	<i>All Substances Above the Threshold Indicated Are:</i> Characterized <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No <i>% weight and role provided for all substances.</i> Screened <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No <i>All substances screened using Priority Hazard Lists with results disclosed.</i> Identified <input type="radio"/> Yes Ex/SC <input type="radio"/> Yes <input checked="" type="radio"/> No <i>One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.</i>
Threshold Disclosed Per <input type="radio"/> Material <input checked="" type="radio"/> Product	Explanation(s) provided for Residuals/Impurities? <input checked="" type="radio"/> Yes <input type="radio"/> No		

CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY
GREENSCREEN SCORE | HAZARD TYPE

NEOPOR® F 5300 PLUS [**POLYSTYRENE (PRIMARY CASRN IS 9003-53-6)** **LT-UNK** **PENTANE (PRIMARY CASRN IS 109-66-0)** **LT-P1** | AQU | PHY | MAM | MUL **GRAPHITE (PRIMARY CASRN IS 7782-42-5)** **LT-UNK** **ISOPENTANE (PRIMARY CASRN IS 78-78-4)** **LT-P1** | AQU | PHY | MAM | MUL **UNDISCLOSED** **LT-1** | PBT]

Number of Greenscreen BM-4/BM3 contents ... 0

Contents highest concern GreenScreen Benchmark or List translator Score ... LT-1
Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

All substances including residuals and impurities above the OSHA threshold are included in the screening process.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: GreenGuard - Gold (previously Children & Schools)
VOC emissions: GreenGuard - Indoor Air Quality Certified

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared

VERIFIER:
VERIFICATION #:

SCREENING DATE: 2020-08-05

PUBLISHED DATE: 2021-01-29

EXPIRY DATE: 2023-08-05

Section 2: Content in Descending Order of Quantity

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.2, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-2-standard

NEOPOR® F 5300 PLUS

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: All substances including residuals and impurities above the declared threshold are included in the HPD evaluation.

OTHER PRODUCT NOTES: All insulation boards with Neopor® F 5300 Plus GPS meet not only the demanding criteria of the Greenguard certificate, but also the requirements of the Californian Department of Public Health Services. As a result, the raw material has been given the Greenguard Gold label, which means it may also be used in schools and health facilities accommodating children or elderly people, in addition to commercial buildings.

Manufacturers producing Neopor® Plus GPS insulation boards can also benefit from the certification of the raw material; by applying for an extended license from UL (Underwriter Laboratories), they can have their product labeled as protective of health for indoor spaces.

An Environmental Product Declaration (EPD 10152) is available at:
info.nsf.org/Certified/Sustain/ProdCert/EPD10152.pdf

POLYSTYRENE (PRIMARY CASRN IS 9003-53-6)

ID: 666836-48-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-08-05

#: 80.0000 - 100.0000

GS: LT-UNK

RC: None

NANO: No

SUBSTANCE ROLE: Insulator

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Neopor® is composed of small black beads of polystyrene (EPS) granulate containing a blowing agent, which makes it expandable. The material developed and produced by BASF is processed by foam manufacturers into insulation materials and systems for a wide range of applications.

PENTANE (PRIMARY CASRN IS 109-66-0)

ID: 8031-35-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-08-05

#: 3.0000 - 7.0000

GS: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Blowing agent

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

AQU

EU - GHS (H-Statements)

H411 - Toxic to aquatic life with long lasting effects

PHY

EU - GHS (H-Statements)

H225 - Highly flammable liquid and vapour

MAM

EU - GHS (H-Statements)

H304 - May be fatal if swallowed and enters airways

MUL

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

SUBSTANCE NOTES: Pentane is used as a blowing agent

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-08-05**

%: **3.0000 - 7.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Heat or UV stabilizer**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This substance is used for heat retention

ISOPENTANE (PRIMARY CASRN IS 78-78-4)

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-08-05**

%: **0.3000 - 3.0000** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Blowing agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
AQU	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
PHY	EU - GHS (H-Statements)	H224 - Extremely flammable liquid and vapour
MAM	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: This substance is a blowing agent

UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-08-05**

%: **0.1000 - 2.0000** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Flame retardant**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PBT	EHP - San Antonio Statement on BFRs & CFRs	Flame retardant substance class of concern for PB&T & long range transport
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action

SUBSTANCE NOTES: This is a proprietary polymer supports flame retardation.

Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

VOC EMISSIONS	GreenGuard - Gold (previously Children & Schools)		
CERTIFYING PARTY: Third Party	ISSUE DATE: 2008-04-	EXPIRY DATE: 2021-	CERTIFIER OR LAB: UL
APPLICABLE FACILITIES: Florham Park , NJ Wyandotte, MI	21	10-08	
CERTIFICATE URL: https://spot.ul.com/main-app/products/detail/5ad1e81d55b0e82d946a094a?page_type=Products%20Catalog			
CERTIFICATION AND COMPLIANCE NOTES: Document #5253-420			

VOC EMISSIONS	GreenGuard - Indoor Air Quality Certified		
CERTIFYING PARTY: Third Party	ISSUE DATE: 2004-11-	EXPIRY DATE: 2021-	CERTIFIER OR LAB: UL
APPLICABLE FACILITIES: Florham Park, NJ Wyandotte, MI	08	10-08	
CERTIFICATE URL: https://spot.ul.com/main-app/products/detail/5ad1e81d55b0e82d946a094a?page_type=Products%20Catalog			
CERTIFICATION AND COMPLIANCE NOTES: Document # 5253-410			

Section 4: Accessories

This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.

No accessories are required for this product.

Section 5: General Notes

Why consider Neopor® for your next project? • Environment: Neopor is a low-carbon GreenGuard Gold certified high-performing rigid insulation with a product-specific EPD. • Flexibility: Neopor insulation can be used for Cavity Wall, Perimeter, Roof, EIFS, Stucco, Precast, SIPs, ICFs and more. • Savings: Per nominal inch, Neopor can deliver the same R-value as XPS using up to 30% less raw material. • Digital: Assets to help you with your project including BIM objects, videos and more. • Availability: Neopor Plus GPS is manufactured nationwide through our authorized network ensuring local supply. • Stable R-value: Neopor doesn't rely on captive gases to boost its R-value. There is no R-value decline over time. • Performance: Neopor Plus GPS has low water absorption while remaining vapor-open delivering best in class insulating performance.

MANUFACTURER INFORMATION

MANUFACTURER: BASF Corporation
ADDRESS: 1609 Biddle Ave.
 Wyandotte MI 48192, US
WEBSITE: <https://neopor.basf.us/>

CONTACT NAME: Customer Care
TITLE: Business Development, Neopor
PHONE: 800-533-8966
EMAIL: Neopor-US@basf.com

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

AQU Aquatic toxicity	LAN Land toxicity	PHY Physical hazard (flammable or reactive)
CAN Cancer	MAM Mammalian/systemic/organ toxicity	REP Reproductive
DEV Developmental toxicity	MUL Multiple	RES Respiratory sensitization
END Endocrine activity	NEU Neurotoxicity	SKI Skin sensitization/irritation/corrosivity
EYE Eye irritation/corrosivity	NF Not found on Priority Hazard Lists	UNK Unknown
GEN Gene mutation	OZO Ozone depletion	
GLO Global warming	PBT Persistent, bioaccumulative, and toxic	

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-UNK List Translator Benchmark Unknown (the chemical is present on at least one GreenScreen Specified List, but the information contained within the list did not result in a clear mapping to a LT-1 or LTP1 score.)
BM-2 Benchmark 2 (use but search for safer substitutes)	NoGS No GreenScreen.
BM-1 Benchmark 1 (avoid - chemical of high concern)	
BM-U Benchmark Unspecified (due to insufficient data)	
LT-P1 List Translator Possible 1 (Possible Benchmark-1)	

Recycled Types

PreC Pre-consumer recycled content
PostC Post-consumer recycled content
UNK Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms:

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Inventory Methods:

Nested Method / Material Threshold Substances listed within each material per threshold indicated per material
Nested Method / Product Threshold Substances listed within each material per threshold indicated per product
Basic Method / Product Threshold Substances listed individually per threshold indicated per product

Nano Composed of nano scale particles or nanotechnology
Third Party Verified Verification by independent certifier approved by HPDC
Preparer Third party preparer, if not self-prepared by manufacturer
Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- a method for the assessment of exposure or risk associated with product handling or use,
- a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.