FOAMULAR® NGX® XPS Pipe Insulation Fabrication Billets by Owens Corning

Health Product Declaration v3.0

created via: HPDC Online Builder

SCREENING DATE: 2025-11-19
PUBLISHED DATE: 2025-11-19
EXPIRY DATE: 2028-11-19
PREPARER: Self-Prepared

HPD UNIQUE IDENTIFIER: 1002124288
HPD UNIQUE PRODUCT ID: Not provided.
CLASSIFICATION: 07 21 13.13 Foam Board Insulation
PRODUCT DESCRIPTION: FOAMULAR® NGX® Extruded Polystyrene (XPS) Fabrication Billets are manufactured from rigid sheets of foam made using Owens Corning's Hydrovac® process technology. The unique closed-cell structure of FOAMULAR® NGX® XPS insulation makes it highly resistant to moisture, and thus low in water absorption but high in insulating capability. FOAMULAR® NGX® XPS Fabrication Billets are factory laminated using a specially formulated polyurethane-based adhesive under strict process controls to ensure performance.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format
→ Nested Materials Method

Threshold Disclosed Per
→ Product

Threshold Level
→ 100 ppm

Residuals/Impurities Evaluation
Completed in **2** of **2** Materials

Explanation(s) provided for Residuals/Impurities?
Yes

For all contents above the threshold, the manufacturer has:

Characterized Yes
Provided weight and role.

Screened Yes
Provided screening results using HPDC-approved methods.

Identified No
Provided name and CAS RN or other identifier.

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.

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

FOAMULAR® NGX® XPS INSULATION [POLYSTYRENE LT-UNK
POLYSTYRENE LT-UNK **UNDISCLOSED** LT-1 | PBT | PHY
UNDISCLOSED LT-1 | PBT **UNDISCLOSED** LT-1 | PBT **UNDISCLOSED** LT-UNK **2,3-DIMETHYL-2,3-DIPHENYLBUTANE** LT-P1 | MUL
GRAPHITE LT-UNK **UNDISCLOSED** NoGS **] ADHESIVE [**
UNDISCLOSED LT-P1 | MAM | EYE | AQU **]**

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

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1, LT-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Substances representing 100% of the product weight meet the 100 ppm Threshold and are Screened; residuals have been considered to this threshold as well.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

COMPLIANCE *See Section 3 for additional listings.*

VOC emissions: UL/GreenGuard Gold Certified
VOC emissions: UL/GreenGuard Certified
Recycled content: SCS Recycled Content Certification - Recycling Programs
Multi-attribute: Environmental Product Declaration (EPD) by SCS

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.
Pre-checked for LEED v4.1 Option 1.

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 3.0, available on the HPDC website at: www.hpd-collaborative.org/hpd-3-0-standard

FOAMULAR® NGX® XPS INSULATION **%: 85.0000 - 98.0000**

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: To the best of our knowledge, all residuals and impurities are considered to the 100 ppm disclosure threshold.

OTHER MATERIAL NOTES:

POLYSTYRENE ID: **9003-53-6**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-11-19 14:39:15**

%: **34.0000 - 92.0000** GreenScreen: **LT-UNK** RC: **PreC** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance

SUBSTANCE NOTES: Resin used in making the FOAMULAR® NGX® Board.

POLYSTYRENE ID: **9003-53-6**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-11-19 14:39:16**

%: **0.0000 - 30.0000** GreenScreen: **LT-UNK** RC: **PreC** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance

SUBSTANCE NOTES: See the SCS Global Services recycle content certificate for the currently certified level of pre consumer recycle content.

UNDISCLOSED ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-11-19 14:39:16**

%: **2.0000 - 6.0000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Blowing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
PHY	Québec CSST - WHMIS 1988	Class B1 - Flammable gases
PHY	GHS - Japan	H220 - Extremely flammable gas [Flammable gases - Category 1]
PHY	GHS - New Zealand	Flammable gas category 1A

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance

SUBSTANCE NOTES: Component of the blowing agent blend. This blowing agent has a low global warming potential compared to other commercially available hydrofluorocarbons.

UNDISCLOSED ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-11-19 14:39:17**

%: **0.0000 - 5.0000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Blowing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance

SUBSTANCE NOTES: Component of the blowing agent blend. This blowing agent is a hydrofluoroolefin with very low global warming potential.

UNDISCLOSED ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-11-19 14:39:17**

%: **0.0000 - 5.0000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Blowing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance

SUBSTANCE NOTES: Component of the blowing agent blend. This blowing agent is a hydrofluoroolefin with very low global warming potential.

UNDISCLOSED ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-11-19 14:39:17**

%: **0.1000 - 4.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Nucleating agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: This resin is the carrier for an additive.

2,3-DIMETHYL-2,3-DIPHENYLBUTANE ID: **1889-67-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-11-19 14:39:17**

%: **0.1000 - 2.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Flame retardant**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

GRAPHITE ID: **7782-42-5**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-11-19 14:39:18**

%: **0.1000 - 2.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Nucleating agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: This substance is an additive to improve some of the product properties.

UNDISCLOSED ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-11-19 14:39:18**

%: **0.0000 - 1.5000** GreenScreen: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Colorant used in the production process.

ADHESIVE **%: 4.0000 - 15.0000**

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: To the best of our knowledge, all residual and impurities are considered to the 100 ppm disclosure level.

OTHER MATERIAL NOTES: Adhesive used to bond with the polystyrene and create the billets.

UNDISCLOSED ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-11-19 14:39:18**

%: **99.0000 - 100.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Adhesive**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
EYE	GHS - Japan	H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]
MAM	GHS - Japan	H371 - May cause damage to organs [Specific target organs/systemic toxicity following single exposure - Category 2]
AQU	GHS - Japan	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Japan	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: dust, mist) - Category 2]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: The role of the adhesive is to bind the foam boards together into billets.

Section 3: 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	UL/GreenGuard Gold Certified	

COMPLIANCE TYPE: Third Party
CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: UL Environment
COMPLIANCE DETAILS:
COMPLIANCE SCOPE:
APPLICABLE FACILITIES: Tallmadge, OH, USA; Gresham, OR, USA; Rockford, IL, USA; Valleyfield, QC, CAN;
COMPLIANCE URL: https://spot.ul.com
COMPLIANCE NOTES: The GREENGUARD Gold Certification standard includes health based criteria for additional chemicals and also requires lower total VOC emissions levels to ensure that products are acceptable for use in environments such as schools and healthcare facilities. GREENGUARD Gold certification standard meets the requirements for California Department of Public Health's CDPH Standard. Certificate # 192566-420

ISSUE DATE: 2006-02-17 **EXPIRY DATE:** No expiration

VOC EMISSIONS	UL/GreenGuard Certified	

COMPLIANCE TYPE: Third Party
CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: UL Environment
COMPLIANCE DETAILS:
COMPLIANCE SCOPE:
APPLICABLE FACILITIES: Tallmadge, OH, USA; Gresham, OR, USA; Rockford, IL, USA; Valleyfield, QC, CAN;
COMPLIANCE URL: https://spot.ul.com
COMPLIANCE NOTES: GREENGUARD product emissions certification. Certificate # 192566-410

ISSUE DATE: 2003-06-16 **EXPIRY DATE:** No expiration

RECYCLED CONTENT	SCS Recycled Content Certification - Recycling Programs	

COMPLIANCE TYPE: Third Party
CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: SCS Global Services
COMPLIANCE DETAILS:
COMPLIANCE SCOPE:
APPLICABLE FACILITIES: Tallmadge, OH, USA; Gresham, OR, USA; Rockford, IL, USA; Valleyfield, QC, CAN
COMPLIANCE URL: https://www.scsglobalservices.com/certified-green-products-guide
COMPLIANCE NOTES: See SCS Certificate SCS-RC-01132.

ISSUE DATE: 2018-04-01 **EXPIRY DATE:** No expiration

MULTI-ATTRIBUTE	Environmental Product Declaration (EPD) by SCS

COMPLIANCE TYPE: Third Party
ISSUE DATE: 2024-01-10
EXPIRY DATE: No expiration
CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: SCS Global Services
COMPLIANCE DETAILS:
COMPLIANCE SCOPE:
APPLICABLE FACILITIES: Tallmadge, OH, USA; Gresham, OR, USA; Rockford, IL, USA; Valleyfield, QC, CAN
COMPLIANCE URL: https://www.scsglobalservices.com/certified-green-products-guide
COMPLIANCE NOTES:

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

The HPD Builder was used to screen all chemicals used in making the product.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Owens Corning**
ADDRESS: **One Owens Corning Parkway**
Toldeo, Ohio 43659
COUNTRY: **United States**

WEBSITE: **www.owenscorning.com**
CONTACT NAME: **Nick Haukom**
TITLE: **Environmental Sustainability Lead**
PHONE: **800-GET-PINK**
EMAIL: **nick.haukom@owenscorning.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
CAN Cancer
DEV Developmental toxicity
END Endocrine activity
EYE Eye irritation/corrosivity
GEN Gene mutation
GLO Global warming
LAN Land toxicity
MAM Mammalian/systemic/organ toxicity
MUL Multiple
NEU Neurotoxicity
NF Not found on Priority Hazard Lists
OZO Ozone depletion
PBT Persistent, bioaccumulative, and toxic
PHY Physical hazard (flammable or reactive)
REP Reproductive
RES Respiratory sensitization
SKI Skin sensitization/irritation/corrosivity
UNK Unknown

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)
BM-3 Benchmark 3 (use but still opportunity for improvement)
BM-2 Benchmark 2 (use but search for safer substitutes)
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)
LT-1 List Translator 1 (Likely Benchmark-1)
LT-UNK List Translator Benchmark Unknown
NoGS No GreenScreen.

GreenScreen Benchmark scores sometimes also carry subscripts, which provide more context for how the score was determined. These are DG (data gap), TP (transformation product), and CoHC (chemical of high concern). For more information, see 2.2.2.4 GreenScreen® for Safer Chemicals, www.greenscreenchemicals.org, and Best Practices for Hazard Screening on the HPDC website (hpd-collaborative.org).

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.