

HPD UNIQUE IDENTIFIER: 808350720

HPD UNIQUE PRODUCT ID: Not provided.

CLASSIFICATION: 07 21 00 Thermal Insulation

PRODUCT DESCRIPTION: The Arnon KSA HEATBAN XPS Thermal Insulation Board offers superior thermal performance and durability for optimal energy efficiency. The high-density XPS panels feature a closed-cell structure that excels in heat resistance, water repellency, and compressive strength. Ideal for inverted roofs, walls, foundations, and high-load applications, these panels reduce energy consumption while enhancing comfort.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY		
Inventory Reporting Format	Residuals/Impurities Evaluation	For all contents above the threshold, the manufacturer has:
→ Basic Method	→ Completed	
Threshold Disclosed Per	Explanation(s) provided :	
→ Product	Yes	
Threshold Level		
→ 1,000 ppm		
	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.	Number of Greenscreen BM-4/BM3 contents ... 1
	Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-1, BM-1, LT-P1
	Nanomaterial ... No
	INVENTORY AND SCREENING NOTES:
	Special Conditions applied: [MixedRecycledContent]
	Special Conditions applied: [Polymers]
	Arnon worked with the HPDC Approved Preparer to confirm that all intentionally added ingredients, residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT	
VOC Content data is not applicable for this product category.	COMPLIANCE See Section 3 for additional listings.
	VOC emissions: CDPH Standard Method - Not tested
	EPD: Environmental Product Declaration
	Certificate of product conformity for Rigid Cellular Polystyrene Thermal Insulation: CERTIFICATE OF PRODUCT CONFORMITY
	Certificate of Compliance - Foamed Plastic: Certificate of Compliance
	CONSISTENCY WITH OTHER PROGRAMS
	Pre-checked for LEED v4 Option 1.
	Pre-checked for LEED v4.1 Option 1.

INGREDIENT DESCRIPTION: Regrind of pre consumer polystyrene

ANALYTICAL TESTING: N/A

BATCH VARIATION: No, In house regrind

COUNTRY OF ORIGIN: Saudi Arabia

MATERIAL CONTENT NOTES: In house regrind

This disclosure does not provide information on the potential presence of hazardous substances which may be found in certain mixed recycled materials.

1,1-DIFLUOROETHANE

ID: 75-37-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2025-12-10 17:43:04

%: 4.8800 - 6.2500 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:

WHITE MINERAL OIL

ID: 8042-47-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2025-12-10 17:43:05

%: 1.6100 - 2.7000 GreenScreen: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Plasticizer

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	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Some Solvents

SUBSTANCE NOTES:

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-10 17:43:06	
%: 1.6300 - 2.0800	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Blowing agent
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H220 - Extremely flammable gas [Flammable gases - Category 1]		
EYE	GHS - New Zealand	Eye irritation category 2		
PHY	GHS - Japan	H220 - Extremely flammable gas [Flammable gases - Category 1]		
PHY	GHS - New Zealand	Flammable gas category 1A		
PHY	GHS - Australia	H220 - Extremely flammable gas [Flammable gases - Category 1]		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List		
		Some Solvents		
SUBSTANCE NOTES:				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-10 17:43:09	
%: 0.7200 - 1.0800	GreenScreen: LT-1	RC: None	NANO: No	POLYMER ROLE: Flame retardant
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	
RESTRICTED LIST	International Living Future Institute (ILFI)		Living Building Challenge 4.0 - Red List of Materials & Chemicals - Effective February 1, 2025	
			Red List substances to avoid in Living Building Challenge V4.0 projects	
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)		C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025	
			Avoidance of Organohalogens and Functionally Related Chemical Classes of Concern	
POLYMER TYPE: Thermoplastic				

AVERAGE MOLECULAR WEIGHT : ≥1,000 Da and ≤ 10,000 Da	
PERCENTAGE OF POLYMER WITH MOLECULAR WEIGHT LESS THAN 500 DA: Unknown	
ADDITIONAL SUBSTANCES CONSIDERED: Yes	
POLYMER NOTES: This polymer has been reported in accordance to HPDC Special Conditions Policy for polymers without disclosed CAS numbers.	
ADDITIONAL NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 3	
UNDISCLOSED	ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-10 17:43:08		
%: 0.2000 - 0.2700	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Nucleating agent
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
CAN	MAK		Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification	
CAN	CA EPA - Prop 65		Carcinogen - specific to chemical form or exposure route	
CAN	IARC		Group 2a - Agent is probably Carcinogenic to humans	
MAM	GHS - Japan		H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]	
MAM	GHS - Japan		H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. The GreenScreen® Benchmark Score of BM-1 comes from the HPDC Builder Tool. 1

UNDISCLOSED			ID: Undisclosed	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-10 17:43:09	
%: 0.1300 - 0.1900	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Flame retardant
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
RESTRICTED LIST	International Living Future Institute (ILFI)	Living Building Challenge 4.0 - Red List of Materials & Chemicals - Effective February 1, 2025 Red List substances to avoid in Living Building Challenge V4.0 projects
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Avoidance of Organohalogens and Functionally Related Chemical Classes of Concern
SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 4		

ZINC STEARATE

ID: **557-05-1**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-10 17:43:04		
%: 0.0600 - 0.1100	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Lubricant
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
AQU	GHS - New Zealand		Hazardous to the aquatic environment - acute category 1	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)		C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025	
			Children's Toy Products	
SUBSTANCE NOTES:				

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-10 17:43:05		
%: 0.0700 - 0.1100	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: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 5

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-10 17:43:06	
%: 0.0700 - 0.1000	GreenScreen: BM-3dg	RC: None	NANO: No	SUBSTANCE ROLE: Dispersant
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels		
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. The GreenScreen® Benchmark Score of BM-3dg comes from the HPDC Builder Tool. 2

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	CDPH Standard Method - Not tested	
COMPLIANCE TYPE: Self-declared CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: None COMPLIANCE DETAILS: COMPLIANCE SCOPE: APPLICABLE FACILITIES: N/A COMPLIANCE URL: COMPLIANCE NOTES:	ISSUE DATE: 2025-05-28	EXPIRY DATE: No expiration
EPD	Environmental Product Declaration	
COMPLIANCE TYPE: Third Party CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: EPD International AB COMPLIANCE DETAILS: COMPLIANCE SCOPE: APPLICABLE FACILITIES: All COMPLIANCE URL: COMPLIANCE NOTES: In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021	ISSUE DATE: 2024-11-05	EXPIRY DATE: 2029-11-05
CERTIFICATE OF PRODUCT CONFORMITY FOR RIGID CELLULAR POLYSTYRENE THERMAL INSULATION	CERTIFICATE OF PRODUCT CONFORMITY	
COMPLIANCE TYPE: Third Party CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: Dubai Central Laboratory Department (DCLD) of Dubai Municipality COMPLIANCE DETAILS: COMPLIANCE SCOPE: APPLICABLE FACILITIES: All COMPLIANCE URL: COMPLIANCE NOTES: In accordance with DCLD Document Ref. No. DM-DCLD-RD-DP21-2001 (IC) "General Rules for DM third party product certification system through factory assessment" ASTM- C578: 2023	ISSUE DATE: 2025-06-03	EXPIRY DATE: 2026-06-02
CERTIFICATE OF COMPLIANCE - FOAMED PLASTIC	Certificate of Compliance	
COMPLIANCE TYPE: Third Party CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: Underwriters Laboratory COMPLIANCE DETAILS: COMPLIANCE SCOPE: APPLICABLE FACILITIES: All COMPLIANCE URL: COMPLIANCE NOTES: Standard for Surface Burning Characteristics for Building Materials, UL723	ISSUE DATE: 2021-09-01	EXPIRY DATE: No expiration

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.

 Section 5: General Notes

The Arnon KSA HEATBAN XPS Thermal Insulation Board offers superior thermal performance and durability for optimal energy efficiency. The high-density XPS panels feature a closed-cell structure that excels in heat resistance, water repellency, and compressive strength. Ideal for inverted roofs, walls, foundations, and high-load applications, these panels reduce energy consumption while enhancing comfort.

MANUFACTURER INFORMATION

MANUFACTURER: **Arnon Plastic Industries Co. Ltd.**
ADDRESS: **Second Industrial City, Dammam 31545**
Dammam, Dammam 60290
COUNTRY: **Saudi Arabia**

WEBSITE: **www.arnon.com.sa**
CONTACT NAME: **Jayakandan Jayabalan**
TITLE: **Technical Director**
PHONE: **+966 13 812 2099**
EMAIL: **jai@arnon.com.sa**

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-P1 List Translator Possible 1 (Possible Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS No GreenScreen.
BM-U Benchmark Unspecified (due to insufficient data)	

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.