

HPD UNIQUE IDENTIFIER: 24606

CLASSIFICATION: 07 21 13.13 Foam Board Insulation

PRODUCT DESCRIPTION: SOPRA-XPS is an extruded polystyrene thermal insulation board used in roofs, walls and foundations. It is composed of a closed-cell, rigid extruded polystyrene foam core. Since October 2020, SOPRA-XPS is using Solstice GBA, a low-GWP, HFO-based blowing agent (HFO 1234ze).

Section 1: Summary

Nested Method / Material Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold level	Residuals/Impurities	<i>All Substances Above the Threshold Indicated Are:</i>
<input checked="" type="radio"/> Nested Materials Method	<input type="radio"/> 100 ppm	Residuals/Impurities	Characterized <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No
<input type="radio"/> Basic Method	<input checked="" type="radio"/> 1,000 ppm	Considered in 0 of 1 Materials	<i>% weight and role provided for all substances.</i>
Threshold Disclosed Per	<input type="radio"/> Per GHS SDS	Explanation(s) provided for Residuals/Impurities?	Screened <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No
<input checked="" type="radio"/> Material	<input type="radio"/> Other	<input checked="" type="radio"/> Yes <input type="radio"/> No	<i>All substances screened using Priority Hazard Lists with results disclosed.</i>
<input type="radio"/> Product			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>

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**

**POLYSTYRENE FOAM [ POLYSTYRENE LT-UNK 1,3,3,3-TETRAFLUOROPROPENE, (1E)- (HFO 1234ZE) LT-UNK UNDISCLOSED BM-2 | CAN | END | DEV | REP | PHY LIMESTONE, CALCIUM CARBONATE LT-UNK CARBON DIOXIDE (CARBON DIOXIDE) NoGS TALC BM-1 | CAN UNDISCLOSED LT-UNK UNDISCLOSED LT-1 | PBT CARBON BLACK BM-1 | CAN GLYCERIDES, C16-18 MONO- LT-UNK ]**

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

Contents highest concern GreenScreen Benchmark or List translator Score ... BM-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

SOPRA-XPS is available in seven (7) different levels of compressive strength (20, 25, 30, 35, 40, 60, and 100 psi) and in thicknesses from 25 to 102 mm (1 to 4 inches). Ranges were given to substance and ingredient percentages to cover all configurations. No substance other than those listed in this HPD have been added to the finished product during its manufacturing. Residuals could not be considered for all materials because information was not provided by all raw materials vendors.

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: CDPH Standard Method V1.2 (Section 01350/CHPS) - Classroom & Office scenario

VOC emissions: UL/GreenGuard Gold Certified

Recycled content: Recycled Content

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients Option 1

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2021-05-03

PUBLISHED DATE: 2021-05-03

EXPIRY DATE: 2024-05-03

## 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](http://www.hpd-collaborative.org/hpd-2-2-standard)

### POLYSTYRENE FOAM

#: 100.0000 - 100.0000

MATERIAL THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Residuals could not be considered for all materials because information was not provided by all raw materials vendors.

OTHER MATERIAL NOTES: SOPRA-XPS is entirely composed of polystyrene foam.

### POLYSTYRENE

ID: 9003-53-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2021-05-03 12:31:58

#: 65.0000 - 96.0000

GS: LT-UNK

RC: Both

NANO: No

SUBSTANCE ROLE: Polymer species

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Polystyrene is used as the main ingredient in SOPRA-XPS. Post-consumer recycled content of SOPRA-XPS ranges from 10% to 18% depending on the grade. Pre-consumer recycled content of SOPRA-XPS ranges from 14% to 25% depending on the grade. Total recycled content ranges from 24% to 43% as validated by an independent third party according to ISO 14020/21. The total recycled content of SOPRA-XPS including the recovery of scraps and non-compliant products in the manufacturing process ranges from 57% to 71%.

### 1,3,3,3-TETRAFLUOROPROPENE, (1E)- (HFO 1234ZE)

ID: 29118-24-9

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2021-05-03 12:31:58

#: 2.0000 - 5.0000

GS: LT-UNK

RC: None

NANO: No

SUBSTANCE ROLE: Blowing agent

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Blowing agent with a global warming potential (GWP) no greater than 1.

### UNDISCLOSED

ID: Undisclosed

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2021-05-03 12:31:59

#: 0.5000 - 5.0000

GS: BM-2

RC: None

NANO: No

SUBSTANCE ROLE: Blowing agent

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	IARC	Group 1 - Agent is Carcinogenic to humans
CAN	MAK	Carcinogen Group 5 - Genotoxic carcinogen with very slight risk under MAK/BAT levels
DEV	CA EPA - Prop 65	Developmental - specific to chemical form or exposure route
CAN	GHS - Japan	Carcinogenicity - Category 1A [H350]
REP	GHS - Japan	Toxic to reproduction - Category 1A [H360]
PHY	EU - GHS (H-Statements)	H225 - Highly flammable liquid and vapour

SUBSTANCE NOTES: Co-blowing agent with a GWP below 100.

### LIMESTONE, CALCIUM CARBONATE

ID: 1317-65-3

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>	HAZARD SCREENING DATE: <b>2021-05-03 12:31:59</b>			
%: <b>0.5000 - 5.0000</b>	GS: <b>LT-UNK</b>	RC: <b>None</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Filler</b>
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		

SUBSTANCE NOTES: Carrier additive for colorant used in the foam.

### CARBON DIOXIDE (CARBON DIOXIDE)

ID: 463-79-6

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>	HAZARD SCREENING DATE: <b>2021-05-03 12:32:00</b>			
%: <b>0.5000 - 5.0000</b>	GS: <b>NoGS</b>	RC: <b>None</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Blowing agent</b>
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		

SUBSTANCE NOTES: Blowing agent with a GWP of 1 (reference of the GWP scale).

### TALC

ID: 14807-96-6

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>	HAZARD SCREENING DATE: <b>2021-05-03 12:32:00</b>			
%: <b>0.1000 - 1.5000</b>	GS: <b>BM-1</b>	RC: <b>None</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Nucleating agent</b>
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification		
CAN	IARC	Group 2b - Possibly carcinogenic to humans		

SUBSTANCE NOTES: Talc is used as an additive to control foam generation.

**UNDISCLOSED**

ID: **Undisclosed**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-05-03 12:32:01**

#: **0.1000 - 0.5000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Lubricant**

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

SUBSTANCE NOTES: Additive used in lubrication of extrusion process.

**UNDISCLOSED**

ID: **Undisclosed**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-05-03 12:32:01**

#: **0.1000 - 1.0000** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Flame retardant**

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

SUBSTANCE NOTES: Non-HBCD additive to provide fire retardant performance to foam.

**CARBON BLACK**

ID: **1333-86-4**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-05-03 12:32:02**

#: **0.0500 - 0.2500** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
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 2B - Possibly carcinogenic to humans - inhaled from occupational sources

SUBSTANCE NOTES: Main ingredient of coloring the polystyrene foam.

**GLYCERIDES, C16-18 MONO-**

ID: **91052-47-0**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-05-03 12:32:03**

#: **Impurity/Residual** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

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



## 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	CDPH Standard Method V1.2 (Section 01350/CHPS) - Classroom & Office scenario		
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Sherbrooke, QC, Canada CERTIFICATE URL:	ISSUE DATE: 2021-04-26	EXPIRY DATE: 2022-04-29	CERTIFIER OR LAB: UL Environment
CERTIFICATION AND COMPLIANCE NOTES: SOPRA-XPS meets all requirements of CDPH standard method V1.2. Report number 1001148207-3669765 from UL Environment.			

VOC EMISSIONS	UL/GreenGuard Gold Certified		
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Sherbrooke, QC, Canada CERTIFICATE URL: <a href="https://spot.ul.com/main-app/products/detail/5cd9cd5055b0e81d607f4174?page_type=Products%20Catalog">https://spot.ul.com/main-app/products/detail/5cd9cd5055b0e81d607f4174?page_type=Products%20Catalog</a>	ISSUE DATE: 2019-04-29	EXPIRY DATE: 2022-04-29	CERTIFIER OR LAB: UL Environment
CERTIFICATION AND COMPLIANCE NOTES: Certified to UL2818-2013. Certificate number 138124-420 from UL Environment.			

RECYCLED CONTENT	Recycled Content		
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Sherbrooke, QC, Canada CERTIFICATE URL: <a href="https://files.soprema.ca//2020-11-02/Attestation_contenu_recycle_SOPRA-XPS_CT-consultant_FR.pdf5fa044128b9534eb264b28e7a6134e4fbf6055c585d3c.pdf">https://files.soprema.ca//2020-11-02/Attestation_contenu_recycle_SOPRA-XPS_CT-consultant_FR.pdf5fa044128b9534eb264b28e7a6134e4fbf6055c585d3c.pdf</a>	ISSUE DATE: 2020-10-01	EXPIRY DATE: 2021-09-30	CERTIFIER OR LAB: CT Consultant
CERTIFICATION AND COMPLIANCE NOTES: Post-consumer recycled content of SOPRA-XPS ranges from 10% to 18% depending on the grade. Pre-consumer recycled content of SOPRA-XPS ranges from 14% to 25% depending on the grade. Total recycled content ranges from 24% to 43% as validated by an independent third party according to ISO 14020/21. The total recycled content of SOPRA-XPS including the recovery of scraps and non-compliant products in the manufacturing process ranges from 57% to 71%.			

## 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.

SOPRASEAL STICK FLASHPRO	HPD URL: No HPD Available
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: SOPRASEAL STICK FLASHPRO can be used to bridge joints of SOPRA-XPS if part of the air barrier assembly.	
SOPRASEAL LM 200T	HPD URL: No HPD Available
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: SOPRASEAL LM 200T can be used to adhere SOPRA-XPS on vertical surfaces.	

## Section 5: General Notes

Residuals could not be considered for all materials because information was not provided by all raw materials vendors. Since October 2020, SOPRA-XPS is using Solstice GBA, a low-GWP, HFO-based blowing agent (HFO 1234ze). SOPRA-XPS is fully compliant with all federal, provincial, and state regulations on the use of halocarbons.

**MANUFACTURER INFORMATION**

MANUFACTURER: **Soprema**  
 ADDRESS: **1688 J-B Michaud St.**  
**Drummondville QC J2C 8E9, Canada**  
 WEBSITE: **www.soprema.ca**

CONTACT NAME: **Jean-François Côté**  
 TITLE: **Director, Standards & Scientific Affairs**  
 PHONE: **819 478 8166 x.3290**  
 EMAIL: **jfcote@soprema.ca**

*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**

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

**GreenScreen (GS)**

<b>BM-4</b> Benchmark 4 (prefer-safer chemical)	<b>LT-1</b> List Translator 1 (Likely Benchmark-1)
<b>BM-3</b> Benchmark 3 (use but still opportunity for improvement)	<b>LT-UNK</b> 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.)
<b>BM-2</b> Benchmark 2 (use but search for safer substitutes)	
<b>BM-1</b> Benchmark 1 (avoid - chemical of high concern)	
<b>BM-U</b> Benchmark Unspecified (due to insufficient data)	
<b>LT-P1</b> List Translator Possible 1 (Possible Benchmark-1)	<b>NoGS</b> No GreenScreen.

**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.*