SOPRA-ISO PLUS by Soprema ®

CLASSIFICATION: 07 22 16

PRODUCT DESCRIPTION: POLYISOCYANURATE THERMAL INSULATION BOARD USED IN ROOFING ASSEMBLIES, COMPOSED OF A CLOSED-CELL, RIGID FOAM CORE FACED ON BOTH SURFACES WITH A COATED GLASS FIBER MAT FACER.

Health Product Declaration v2.0

created via: HPDC Online Builder

Section 1: Summary

CONTENT INVENTORY

Threshold per material
- ○ 100 ppm
- ◉ 1,000 ppm
- ○ Per GHS SDS
- ○ Per OSHA MSDS
- ○ Other

Residuals and impurities considered in 0 of 2 materials
- ◉ see Section 2: Material Notes
- ◉ see Section 5: General Notes

Based on the selected Content Inventory Threshold:

Characterized..... Are the Percent Weight and Role provided for all substances?	◉ Yes	○ No
Screened..... Are all substances screened using Priority Hazard Lists with results disclosed?	◉ Yes	○ No
Identified..... Are all substances disclosed by Name (Specific or Generic) and Identifier?	◉ Yes	○ 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

POLYISOCYANURATE FOAM [POLYMERIC MDI (PMDI) LT-UNK | RES | MUL | CAN POLYETHER POLYOL LT-UNK PENTANE LT-P1 | AQU | MAM | MUL | PHY POTASSIUM ACETATE LT-UNK 2-ETHYLHEXANOIC ACID, POTASSIUM SALT LT-UNK BIS(2-DIMETHYLAMINOETHYL)(METHYL)AMINE LT-P1 | MAM | SKI | MUL POLYSILOXANE NoGS TRIS(1-CHLORO-2-PROPYL)PHOSPHATE (TCPP, TMCP) BM-U | END | PBT | MUL WATER BM-4] COATED GLASS FIBER MAT FACER [CALCIUM CARBONATE BM-3 STYRENE BUTADIENE RUBBER (SBR) LT-UNK SOLID GLASS AND GLASS / MINERAL FIBER (SEE VARIANTS) LT-UNK | CAN CARBON BLACK LT-1 | CAN]

Number of Greenscreen BM-4/BM3 contents..... 2

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

Nanomaterial..... No

INVENTORY AND SCREENING NOTES:

SOPRA-ISO PLUS is available in various thicknesses, up to 5 inches. The percentage of foam and facer will vary with thickness, which explains why ranges were given. The exact composition of the polyisocyanurate foam was not disclosed to protect proprietary information; ranges were also given. No substance other than those listed in this HPD have been added to the finished product during its manufacturing. Residuals or impurities could not be considered because information was not provided to the manufacturer by the raw materials vendors.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE
Other: CAN/ULC-S107
Other: CSA A123.21
Other: FM 4470

See Section 3 for additional listings.

◉ Self-Published*	VERIFIER:	SCREENING DATE: May 24, 2017	EXPIRY DATE*: May 24, 2020
○ Third Party Verified	VERIFICATION #:	RELEASE DATE: May 24, 2017	* or within 3 months of significant change in product contents

See HPDC website for details

Section 2: Content in Descending Order of Quantity

This section lists materials in a product and the substances in each material based on the Inventory Threshold for each material. If residuals or impurities from the manufacturing or extraction processes are considered for a material, these are inventoried and characterized to the extent described in the Material and/or General Notes. Chemical substances are screened against the HPD Priority Hazard Lists for human and environmental health impacts. Screening is based on best available information; "Not Found" does not necessarily mean there is no potential hazard associated with the product or its contents. More information about Priority Hazard Lists and the GreenScreen can be found online: www.hpd-collaborative.org and www.greenscreenchemicals.org.

POLYISOCYANURATE FOAM **%: 47.9000 - 83.8000** **HPD URL:**

Inventory Threshold: 1000 ppm Residuals Considered: No

Material Notes: Percentage of foam in SOPRA-ISO PLUS varies with thickness of the product as follows: 1-inch SOPRA-ISO PLUS: 47.9% foam; 2-inch SOPRA-ISO PLUS: 63.9% foam; 4-inch SOPRA-ISO PLUS: 78.9% foam; 5-inch SOPRA-ISO PLUS: 83.8% foam. The exact percentage of substances in foam were not disclosed to protect proprietary information. Ranges were given. Residuals were not considered because information could not be disclosed to the manufacturer by the materials suppliers.

POLYMERIC MDI (PMDI) ID: 9016-87-9

%: 55.0000 - 65.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Isocyanate base for polymer backbone

HAZARDS:		AGENCY(IES) WITH WARNINGS:
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
RESPIRATORY	US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES: Polymeric MDI reacts completely during foam production.

POLYETHER POLYOL ID: 9082-00-2

%: 25.0000 - 30.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Polyol base for polymer backbone

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: Polyester polyol reacts completely during foam production.

PENTANE ID: 109-66-0

%: 3.0000 - 10.0000	GS: LT-P1	RC: None	NANO: NO	ROLE: Blowing agent

HAZARDS:		AGENCY(IES) WITH WARNINGS:
ACUTE AQUATIC	EU - R-phrases	R51 - Toxic to Aquatic Organisms
CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
MAMMALIAN	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H225 - Highly flammable liquid and vapour

SUBSTANCE NOTES: Pentane isomer(s) used as blowing agent. Exact nature and percentages of isomers are not disclosed to protect proprietary information.

POTASSIUM ACETATE ID: 127-08-2

%: 0.1000 - 1.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Catalyst

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: Catalyst for polymerization.

2-ETHYLHEXANOIC ACID, POTASSIUM SALT ID: 3164-85-0

%: 0.1000 - 2.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Catalyst

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: Catalyst for polymerization.

BIS(2-DIMETHYLAMINOETHYL)(METHYL)AMINE ID: 3030-47-5

%: 0.1000 - 1.0000	GS: LT-P1	RC: None	NANO: NO	ROLE: Catalyst

HAZARDS:		AGENCY(IES) WITH WARNINGS:
MAMMALIAN	EU - R-phrases	R22 - Harmful if Swallowed
MAMMALIAN	EU - R-phrases	R24 - Toxic in Contact with Skin
SKIN IRRITATION	EU - R-phrases	R34 - Causes burns
MAMMALIAN	EU - GHS (H-Statements)	H311 - Toxic in contact with skin

SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: Catalyst for polymerization.

POLYSILOXANE ID: 9011-19-2

%: 0.1000 - 1.0000	GS: NoGS	RC: None	NANO: NO	ROLE: Surfactant

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: Foam control agent.

TRIS(1-CHLORO-2-PROPYL)PHOSPHATE (TCPP, TMCP) ID: 13674-84-5

%: 0.1000 - 5.0000	GS: BM-U	RC: None	NANO: NO	ROLE: Fire retardant

HAZARDS:		AGENCY(IES) WITH WARNINGS:
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
PBT	EHP - San Antonio Statement on BFRs & CFRs	Flame retardant substance class of concern for PB&T & long range transport
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	TSCA Work Plan chemical - ongoing chemical (risk) assessment

SUBSTANCE NOTES: TCPP used as fire-retardant for safety of building occupants.

WATER ID: 7732-18-5

%: 0.1000 - 1.0000	GS: BM-4	RC: None	NANO: NO	ROLE: Co-blowing agent

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: Plain water

COATED GLASS FIBER MAT FACER **%: 16.2000 - 52.1000** **HPD URL:**

Inventory Threshold: 1000 ppm Residuals Considered: No

Material Notes: Percentage of coated glass facer in SOPRA-ISO PLUS varies with thickness of the product as follows: 1-inch SOPRA-ISO PLUS: 52.1% facer; 2-inch SOPRA-ISO PLUS: 36.1% facer; 4-inch SOPRA-ISO PLUS: 21.1% facer; 5-inch SOPRA-ISO PLUS: 16.2% facer. Residuals were not considered because information could not be disclosed to the manufacturer by the materials suppliers.

CALCIUM CARBONATE ID: 471-34-1

%: 75.0000 - 85.0000	GS: BM-3	RC: None	NANO: NO	ROLE: Filler material

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: N/A

STYRENE BUTADIENE RUBBER (SBR) ID: 9003-55-8

%: 6.0000 - 12.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Binder for glass mat

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: Portion of polymeric binder for glass mat. Styrene butadiene and styrene acrylic combination.

SOLID GLASS AND GLASS / MINERAL FIBER (SEE VARIANTS) ID: 65997-17-3

%: 5.0000 - 7.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Provide dimensional stability

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	EU - R-phrases	R40 - Limited Evidence of Carcinogenic Effects
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer

SUBSTANCE NOTES: Fibrous glass mat.

CARBON BLACK ID: 1333-86-4

%: 0.0000 - 0.0150	GS: LT-1	RC: None	NANO: NO	ROLE: Pigment

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CANCER	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: Additive to binder for glass mat.

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.

OTHER

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Soprema plants: Drummondville, Québec, Canada and Chilliwack, British Columbia, Canada.
CERTIFICATE URL: http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/showpage.html?name=TGFU.R19921&ccnshorttitle=Roofing+Systems&objid=1083620758&cfgid=1073741824&versi
CERTIFICATION AND COMPLIANCE NOTES: This product is listed in a large number of fire-rated roofing assemblies. These listings are maintained thro plants.

OTHER **CSA A123.21**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Soprema plants: Drummondville, Québec, Canada and Chilliwack, British Columbia, Canada.
CERTIFICATE URL: http://www.exp.com/exp.do?action=getFile&fileId=3126&lang=fr
CERTIFICATION AND COMPLIANCE NOTES: This product has been tested in a large number of roofing assemblies. One example of certification report is report PUB-DRU304337.

ISSUE DATE:	EXPIRY DATE:	CERTIFIER OR LAB:
2014-08-18	2017-08-18	Exp

OTHER **FM 4470**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Soprema plants: Drummondville, Québec, Canada and Chilliwack, British Columbia, Canada.
CERTIFICATE URL:
CERTIFICATION AND COMPLIANCE NOTES: This product is present in a large number of roofing assemblies tested for resistance to wind uplift. FM Approvals Certificate Number 3010173. These listings are maintained through periodic audits from FM in the SOPREMA plants.

ISSUE DATE:	EXPIRY DATE:	CERTIFIER OR LAB:
2012-01-01	0000-00-00	FM Approvals (Factory Mutual)

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

Residuals could not be considered as information was not provided to the manufacturer by raw materials suppliers.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: Soprema

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KEY

OSHA MSDS Occupational Safety and Health Administration Material Safety Data Sheet
GHS SDS Globally Harmonized System of Classi cation and Labeling of Chemicals Safety Data Sheet

Hazard Types

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

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 Unspeci ed (insu cient data to benchmark)
LT-P1 List Translator Possible Benchmark 1
LT-1 List Translator Likely Benchmark 1
LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
UNK Unknown (no data on List Translator Lists)

Recycled Types

PreC Preconsumer (Post-Industrial)
PostC Postconsumer
Both Both Preconsumer and Postconsumer
Unk Inclusion of recycled content is unknown
None Does not include recycled content

Other

Nano Composed of nanoscale particles or nanotechnology

Declaration Level

Self-declared Manufacturer's self-declaration (First Party)
Independent Lab Manufacturer's self-declaration using results from an independent lab
Second Party Verification by trade association or other interested party
Third Party Verification by independent certifier
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 does not provide an assessment of health impacts throughout the product life cycle. It does not provide an assessment of exposure or risk associated with product handling or use. It also does not address potential health impacts of: (i) substances used or created during the manufacturing process unless they remain in the final product, or (ii) substances created after the product is delivered for end use (e.g., if the product burns, degrades, or otherwise changes chemical composition).

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

A disclosure completed in compliance with the HPD Open Standard is referred to as a "Health Product Declaration," or "HPD." 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 Open Standard noted.