

HPD UNIQUE IDENTIFIER: 30588

CLASSIFICATION: 07 21 00 Thermal Insulation

PRODUCT DESCRIPTION: SANCTUARY® Insulation by Greenfiber can be installed in attics, walls, floors, and ceilings to significantly improve the comfort, safety and well-being of any home. This is the first all-in-one fiber insulation that can be blown-in or spray-applied, it's suitable for all climates and conditions. Capable of reducing sound power of sound by 60% and heating and cooling costs by 20%, it's easily installed, environmentally responsible, and packaged to optimize coverage and ease of installation.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

<p>Inventory Reporting Format</p> <p><input type="radio"/> Nested Materials Method</p> <p><input checked="" type="radio"/> Basic Method</p> <p>Threshold Disclosed Per</p> <p><input type="radio"/> Material</p> <p><input checked="" type="radio"/> Product</p>	<p>Threshold Level</p> <p><input type="radio"/> 100 ppm</p> <p><input checked="" type="radio"/> 1,000 ppm</p> <p><input type="radio"/> Per GHS SDS</p> <p><input type="radio"/> Other</p>	<p>Residuals/Impurities Evaluation</p> <p><input type="radio"/> Completed</p> <p><input checked="" type="radio"/> Partially Completed</p> <p><input type="radio"/> Not Completed</p> <p>Explanation(s) provided :</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>	<p><i>For all contents above the threshold, the manufacturer has:</i></p> <p>Characterized <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p><i>Provided weight and role.</i></p> <p>Screened <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p><i>Provided screening results using HPDC-approved methods.</i></p> <p>Identified <input type="radio"/> Yes <input checked="" type="radio"/> No</p> <p><i>Provided name and CAS RN or other identifier.</i></p>
--	--	--	---

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.

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

SANCTUARY® BLOW-IN OR SPRAY-APPLIED CELLULOSE INSULATION [**UNDISCLOSED** LT-1 | END | REP | DEV | MUL | EYE | MAM | SKI **UNDISCLOSED** BM-3dg | **UNDISCLOSED** LT-UNK **UNDISCLOSED** LT-P1 | CAN | SKI | DEV **STARCH** LT-UNK **RECYCLED PAPER**]

Number of Greenscreen BM-4/BM3 contents ... 1
 Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-1, LT-P1
 Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Special Conditions applied: [BiologicalMaterial]

Many of the substances in this product are proprietary. Therefore, the chemical information have not been disclosed.

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 V1.1 (Section 01350/CHPS) - Classroom & Office scenario

CONSISTENCY WITH OTHER PROGRAMS

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

<p>Third Party Verified?</p> <p><input type="radio"/> Yes</p> <p><input checked="" type="radio"/> No</p>	<p>PREPARER: Self-Prepared</p> <p>VERIFIER:</p> <p>VERIFICATION #:</p>	<p>SCREENING DATE: 2022-11-10</p> <p>PUBLISHED DATE: 2022-11-10</p> <p>EXPIRY DATE: 2025-11-10</p>
--	--	--

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 2.3, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-3-standard

SANCTUARY® BLOW-IN OR SPRAY-APPLIED CELLULOSE INSULATION

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED:
Partially

RESIDUALS AND IMPURITIES NOTES: Aside from paper, no significant contaminants are found in the raw material inputs. No residuals and impurities above the inventory threshold are observed during the product manufacturing.

OTHER PRODUCT NOTES:

RECYCLED PAPER

ID: **Biological Material**

HAZARD DATA SOURCE: [HPDC Special Conditions Policy](#)

%: **83.5000 - 85.0000** GreenScreen: **Not Required** RC: **PostC** NANO: **No** MATERIAL ROLE: **Insulator**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
-------------	------------------------	----------

Hazard Screening is not applicable to this Special Condition

BIOLOGICAL MATERIALS CATEGORY: **Tree-based materials**

INGREDIENT DESCRIPTION: **65996-61-4**

MATERIAL CONTENT NOTES: Post-consumer recycled wastepaper makes almost 85% of the total mass of our sanctuary insulation. The incoming waste paper is shredded and the addition of other raw materials in several manufacturing operations produces the final sanctuary.

This disclosure does not provide information on allergens, hyper-accumulation of metals, production of any toxic substances during normal metabolic activities, pesticides, and other potential hazards or sources of hazards which may be found in certain biological materials.

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-11-10 7:12:44**

%: **8.5000 - 9.3000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Flame retardant**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
REP	EU - SVHC Authorisation List	Toxic to reproduction - Candidate list
DEV	MAK	Pregnancy Risk Group B
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 1B
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
REP	EU - SVHC Authorisation List	Toxic to reproduction - Prioritized for listing
END	EU - Priority Endocrine Disruptors	Category 1 - In vivo evidence of Endocrine Disruption Activity
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
REP	GHS - Australia	H360FD - May damage fertility. May damage the unborn child [Reproductive toxicity - Category 1A or 1B]
REP	EU - GHS (H-Statements) Annex 6 Table 3-1	H360FD - May damage fertility. May damage the unborn child [Reproductive toxicity - Category 1A or 1B]
EYE	GHS - New Zealand	Eye irritation category 2
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
REP	GHS - New Zealand	Reproductive toxicity category 2
ADDITIONAL LISTINGS	AGENCY	NOTIFICATION
RESTRICTED LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE SCIL Yellow Triangle - best available in class but some hazard profile issues
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products

SUBSTANCE NOTES: As this is a proprietary substance, the name and CAS RN number is hidden.

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-11-10 7:12:44**

%: **2.3000 - 3.5000** GreenScreen: **BM-3dg** RC: **PreC** NANO: **No** SUBSTANCE ROLE: **Flame retardant**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
	EC - CEPA DSL	Persistent
ADDITIONAL LISTINGS	AGENCY	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Plants use different gypsum materials so the CAS numbers varies by plants. Sanctuary plants in Waco, Texas and Norfolk, Connecticut use this CAS# for gypsum.

The name and CAS RN number is hidden since this is a proprietary substance.

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-11-10 7:12:45**

%: **2.3000 - 3.5000** GreenScreen: **LT-UNK** RC: **PreC** NANO: **No** SUBSTANCE ROLE: **Flame retardant**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	AGENCY	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Plants use different gypsum materials so the CAS numbers varies by plants. Sanctuary plants in Tampa, Florida; Wilkes Barre, Pennsylvania; Salt Lake City, Utah; and Mesa, Arizona use this CAS# for gypsum.

As this is a proprietary substance, the name and CAS RN number is hidden.

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-11-10 7:12:46**

%: **1.5000 - 2.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Hydraulic fluid**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	GHS - Australia	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
DEV	GHS - Australia	H361d - Suspected of damaging the unborn child [Reproductive toxicity - Category 2]
ADDITIONAL LISTINGS	AGENCY	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Various CAS numbers are available for distillate mineral oil and are used in different plants; all have similar hazards on human health.

As this is a proprietary substance, the name and CAS RN number is hidden.

STARCH

ID: 9005-25-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-11-10 7:12:46		
%: 1.3000 - 1.4000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Binder
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	AGENCY	NOTIFICATION		
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex IV listing due to intrinsic safety		
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE SCIL Green Circle - Verified Low Concern		

SUBSTANCE NOTES: Corn starch can be used as an equivalent to wheat starch, they both have similar chemical performance and function as a binder.

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 V1.1 (Section 01350/CHPS) - Classroom & Office scenario	
CERTIFYING PARTY: Third Party	ISSUE DATE: 2013-01-04	CERTIFIER OR LAB: Berkeley
APPLICABLE FACILITIES: Applicable to all manufacturing facilities of Applegate Greenfiber Insulation.	EXPIRY DATE:	Analytical: The Environmental Testing Laboratory
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES: Certificate number: 130104-02; Loose fill insulation demonstrated compliance to school classroom and private office exposure scenario to individual VOCs of concern and formaldehyde.		

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

Sanctuary is engineered to fill tiny crevices and gaps, creating a dense, scientifically advanced barrier. As cellulose insulation that can be blown-in or spray-applied, Sanctuary can be easily installed over existing insulation, and unlike batt or roll alternatives, it is engineered to fill every gap, void and hard-to-reach place without time-consuming cutting and fitting.

MANUFACTURER INFORMATION

MANUFACTURER: Applegate - Greenfiber
ADDRESS: 7535 E Ray Road
 Mesa Arizona 85212, US
WEBSITE: <https://www.greenfiber.com>

CONTACT NAME: Rick Lieberman
TITLE: Plant Manager
PHONE: 216-905-8625
EMAIL: rick.lieberman@aggfinsulation.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-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.