

HPD UNIQUE IDENTIFIER: 29567

CLASSIFICATION: 31 31 16 Termite Control

PRODUCT DESCRIPTION: Pango Wrap is a physical termite barrier against subterranean termites and moisture vapor. The use of a physical termite barrier provides a non-toxic approach to subterranean termite protection and aligns with the principals of Integrated Pest Management. Through patented and trade secret processes, Pango Wrap combines uniquely designed barrier materials with the flexibility and strength of extruded high-performance polyolefin film into an easy-to-install, continuous physical foundation termite barrier. Additional CSI MasterFormat Designations: 07 26 00, 03 30 00, 03 15 21.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

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

PANGO™ WRAP [POLYETHYLENE LT-UNK UNDISCLOSED LT-UNK UNDISCLOSED LT-UNK COPPER LT-P1 | RES | GEN CARBON BLACK BM-1 | CAN]

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

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

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

*** Manufacturer has opted for the basic inventory display – chemical substances are listed by weight in the entire product instead of grouped by material. *** We have worked closely with our suppliers to ensure the least toxic ingredients are chosen while maintaining required performance characteristics. *** Pango Wrap contains no VOC’s.

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 - Not tested

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified? ☐ Yes ☒ No	PREPARER: Self-Prepared VERIFIER: VERIFICATION #:	SCREENING DATE: 2022-04-25 PUBLISHED DATE: 2022-08-11 EXPIRY DATE: 2025-04-25
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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

PANGO™ WRAP

PRODUCT THRESHOLD: Per GHS SDS RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No

RESIDUALS AND IMPURITIES NOTES: Due to the physical nature of the product-- specifically, the manner in which ingredients are physical bound in the polymer matrix-- and the quality built into the sourcing and manufacturing processes, no attempt has been made to catalogue or quantify residuals or impurities at this time.

OTHER PRODUCT NOTES: Variation in processing necessitates that a range of values be reported for this substance.

POLYETHYLENE ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-04-25 11:36:38		
%: 0.0000 - 95.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species
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: The ingredients utilized in Pango® products, which lend various properties to the final product, are in most cases considered Trade Secrets. Therefore, either the specific percentages of each additive (by weight), and/or the exact components themselves, cannot currently be disclosed except for screening purposes.				

UNDISCLOSED ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-04-25 11:36:39		
%: 0.0000 - 95.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species
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: The ingredients utilized in Pango® products, which lend various properties to the final product, are in most cases considered Trade Secrets. Therefore, either the specific percentages of each additive (by weight), and/or the exact components themselves, cannot currently be disclosed except for screening purposes.				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-04-25 11:36:39		
%: 0.0000 - 95.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species
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: The ingredients utilized in Pango® products, which lend various properties to the final product, are in most cases considered Trade Secrets. Therefore, either the specific percentages of each additive (by weight), and/or the exact components themselves, cannot currently be disclosed except for screening purposes.				

COPPER

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-04-25 11:36:37		
%: 0.0000 - 10.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
RES	AOEC - Asthmagens		Asthmagen (Rs) - sensitizer-induced	
GEN	GHS - New Zealand		Germ cell mutagenicity category 1	
ADDITIONAL LISTINGS	AGENCY		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	
SUBSTANCE NOTES: The ingredients utilized in Pango® products, which lend various properties to the final product, are in most cases considered Trade Secrets. Therefore, either the specific percentages of each additive (by weight), and/or the exact components themselves, cannot currently be disclosed except for screening purposes.				

CARBON BLACK

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-04-25 11:36:38		
%: 0.0000 - 3.0000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Filler
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	

ADDITIONAL LISTINGS	AGENCY	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: The ingredients utilized in Pango® products, which lend various properties to the final product, are in most cases considered Trade Secrets. Therefore, either the specific percentages of each additive (by weight), and/or the exact components themselves, cannot currently be disclosed except for screening purposes.

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 - Not tested	
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2022-07-26	CERTIFIER OR LAB: None
APPLICABLE FACILITIES: All	EXPIRY DATE:	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES: VOC content is based upon analysis of the ingredients/substances utilized.		

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.

PANGO® TAPE
MANUFACTURER (OR GENERIC): Stego Industries, LLC
HPD URL: https://www.stegoindustries.com/stego-industries-hpd
ACCESSORY TYPE: Other
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Recommended for all installations.

PANGO CLAW®
MANUFACTURER (OR GENERIC): Stego Industries, LLC
HPD URL: https://www.stegoindustries.com/stego-industries-hpd
ACCESSORY TYPE: Other
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Recommended for all installations

PANGO® BOND
MANUFACTURER (OR GENERIC): Stego Industries, LLC
HPD URL: https://www.stegoindustries.com/stego-industries-hpd
ACCESSORY TYPE: Other
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Recommended for all installations.

PANGO® SEALANT
MANUFACTURER (OR GENERIC): Stego Industries, LLC
HPD URL: https://www.stegoindustries.com/stego-industries-hpd
ACCESSORY TYPE: Other
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Recommended for all installations.

PANGO® SEALANT FORM
MANUFACTURER (OR GENERIC): Stego Industries, LLC
HPD URL: https://www.stegoindustries.com/stego-industries-hpd
ACCESSORY TYPE: Other
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Recommended for all installations.

PANGO® TERM BAR
MANUFACTURER (OR GENERIC): Stego Industries, LLC

Section 5: General Notes

Pango Wrap Termite/Vapor Barrier is a physical barrier against Formosan termites and moisture vapor. Through patented and trade secret processes, Pango Wrap combines uniquely designed barrier materials with the flexibility and strength of extruded, high-performance polyolefin film into an easy-to-install, physical barrier against subterranean termites. Pango Wrap comes from the creators of Stego Wrap Vapor Barrier, the most widely-specified below-slab vapor barrier in North America. Unlike chemical sprays that do nothing to prevent other contaminants from entering the building, Pango Wrap is a high performance vapor barrier as well as a physical termite barrier. Combining these two solutions in one product saves time and labor costs during construction. Pango Wrap is made from game-changing resin technology and provides high performance and longevity. Alternatively, chemical spray solutions must be re-applied to have a chance of being effective long-term against aggressive, subterranean termites. Such termiticides are known to dissipate in effectiveness over time. Pango Wrap provides a long-term solution and may allow builders to greatly reduce or eliminate the use of chemical termiticides for below-slab termite control. ||

*** Stego-defined terms defined at www.stegoindustries.com/legal ||

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MANUFACTURER INFORMATION

MANUFACTURER: Stego Industries, LLC
ADDRESS: 216 Avenida Fabricante
 Suite 101
 San Clemente California 92672, USA
WEBSITE: <https://www.stegoindustries.com/products/pango-wrap>

CONTACT NAME: Ryan Goodwin
TITLE: Product Manager
PHONE: (877) 464-7834
EMAIL: ryangoodwin@stegoindustries.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

