

HPD UNIQUE IDENTIFIER: 21439

CLASSIFICATION: 31 31 16 Termite Control

PRODUCT DESCRIPTION: Pango Wrap Termite/Vapor Barrier is used as a physical barrier against termites and water vapor. Pango Wrap is a multi-layered plastic extrusion that combines uniquely designed materials with only high grade prime, virgin, polyolefin resins. Pango Wrap can be used in systems for the control of subterranean termites and soil gases. The use of Pango Wrap may allow for the reduced use of pesticides and soil poisons for new construction. Additional CSI MasterFormat Designations: 07 26 00, 03 30 00.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
- Basic Method

Threshold level

- 100 ppm
- 1,000 ppm
- Per GHS SDS
- Other

Residuals/Impurities

- Considered
- Partially Considered
- Not Considered

All Substances Above the Threshold Indicated Are:

Characterized Yes Ex/SC Yes No
% weight and role provided for all substances.

Threshold Disclosed Per

- Material
- Product

Explanation(s) provided for Residuals/Impurities?
 Yes No

Screened Yes Ex/SC Yes No
All substances screened using Priority Hazard Lists with results disclosed.

Identified Yes Ex/SC Yes No
One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.

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](#)

[PANGO™ WRAP](#) [[COPPER](#) [LT-P1](#)] | [MUL CARBON BLACK](#) [LT-1](#)] | [CAN](#) [UNDISCLOSED](#)
[LT-UNK](#) [UNDISCLOSED](#) [LT-UNK](#) [UNDISCLOSED](#) [LT-UNK](#)]

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

Contents highest concern GreenScreen Benchmark or List translator Score ... LT-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: N/A
Other: National Green Building Standard 2012 (ICC 700)

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2020-08-14

PUBLISHED DATE: 2020-08-14

EXPIRY DATE: 2023-08-14



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

PANGO™ WRAP

PRODUCT THRESHOLD: Per GHS SDS

RESIDUALS AND IMPURITIES CONSIDERED: 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.

COPPER

ID: 7440-50-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-08-14

#: 0.0000 - 10.0000 GS: LT-P1 RC: None NANO: No SUBSTANCE ROLE: Alloy element

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: The additives utilized in Pango Wrap, which lend various properties to the final product during represent Trade Secrets. Therefore, neither the specific percentages of each additive (by weight), nor the exact components themselves, can currently be disclosed.

CARBON BLACK

ID: 1333-86-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-08-14

#: 0.0000 - 3.0000 GS: LT-1 RC: None NANO: No SUBSTANCE ROLE: Filler

HAZARD TYPE	AGENCY AND LIST TITLES	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: The additives utilized in Pango Wrap, which lend various properties to the final product during represent Trade Secrets. Therefore, neither the specific percentages of each additive (by weight), nor the exact components themselves, can currently be disclosed. This component is integrally incorporated (compounded) into the final product and cannot escape as dust.

UNDISCLOSED

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-08-14

#: 0.0000 - 95.0000 GS: 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

SUBSTANCE NOTES: The polyethylene blend for Pango Wrap, which provides the physical structure of the material and lends the product its specialized performance characteristics, represents a Trade Secret. Therefore, neither the specific percentages of each polyethylene component (by weight), nor the exact resin components themselves, can be disclosed.

UNDISCLOSED

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2020-08-14		
%: 0.0000 - 95.0000	GS: 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		

SUBSTANCE NOTES: The polyethylene blend for Pango Wrap, which provides the physical structure of the material and lends the product its specialized performance characteristics, represents a Trade Secret. Therefore, neither the specific percentages of each polyethylene component (by weight), nor the exact resin components themselves, can be disclosed.

UNDISCLOSED

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2020-08-14		
%: 0.0000 - 95.0000	GS: 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		

SUBSTANCE NOTES: The polyethylene blend for Pango Wrap, which provides the physical structure of the material and lends the product its specialized performance characteristics, represents a Trade Secret. Therefore, neither the specific percentages of each polyethylene component (by weight), nor the exact resin components themselves, can be disclosed.

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

N/A

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2020-08-14**

EXPIRY DATE:

CERTIFIER OR LAB: **None**

APPLICABLE FACILITIES: **All**

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **This is an exterior-applied product.**

OTHER

National Green Building Standard 2012 (ICC 700)

CERTIFYING PARTY: **Third Party**

ISSUE DATE:

EXPIRY DATE:

CERTIFIER OR LAB:

APPLICABLE FACILITIES: **N/A**

DATE: **2016-03-08**

DATE: **2018-03-31**

LAB: **Home Innovations**

CERTIFICATE URL:

http://www.homeinnovation.com/services/certification/green_certified_products/green_certified_product_detail?prodid=472

2016-03-08

2018-03-31

CERTIFICATION AND COMPLIANCE NOTES: **PANGO® TERMITE DEFENSE SYSTEM (PANGO WRAP, PANGO TAPE, AND PANGO CLAW) MANUFACTURED BY STEGO TECHNOLOGY, LLC HAS BEEN CERTIFIED FOR POINTS TOWARD NGBS GREEN CERTIFICATION TO THE ICC 700 NATIONAL GREEN BUILDING STANDARD AS DETAILED IN NGBS GREEN CERTIFIED PRODUCT REPORT #NGBSGCP-00267; CERTIFICATE #00267. Pango Wrap is Home Innovation NGBS Green Certified. Four points can be earned for the NGBS under Termite Barrier (602.1.5) where a continuous physical foundation termite barrier with low toxicity and no chemical treatments are installed in geographical areas with subterranean termite infestation potential. Pango Wrap is Safe for the Environment.****

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

HPD URL: <https://www.stegoindustries.com/stego-industries-hpd>

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Recommended for all installations.

PANGO CLAW®

HPD URL: <https://www.stegoindustries.com/stego-industries-hpd>

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Recommended for all installations.

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 termite defense 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. || Other applicable CSI MasterFormat Sections include 07 26 00 and 03 30 00 || *Stego Industries, LLC is the exclusive Representative for Pango Wrap and accessory products, which are produced for Stego Technology, LLC, a wholly independent company from Stego Industries, LLC. || **Stego-defined terms defined at www.stegoindustries.com/legal || Stego, the stegosaurus design logo[s], Crete Claw, StegoTack, StegoCrawl, Beast, and the Beast design logo are all deemed to be registered and/or protectable trademarks or service marks of Stego Industries, LLC. Pango, the pangolin logo, and Pango Claw are deemed to be registered and/or protectable trademarks of Stego Technology, LLC. © 2017 Stego Industries, LLC. All Rights Reserved. Installation, Warranty and State Approval Information: www.stegoindustries.com/legal.

**MANUFACTURER INFORMATION**MANUFACTURER: **Stego Technology, 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**CAN** Cancer**DEV** Developmental toxicity**END** Endocrine activity**EYE** Eye irritation/corrosivity**GEN** Gene mutation**GLO** Global warming**LAN** Land toxicity**MAM** Mammalian/systemic/organ toxicity**MUL** Multiple**NEU** Neurotoxicity**NF** Not found on Priority Hazard Lists**OZO** Ozone depletion**PBT** Persistent, bioaccumulative, and toxic**PHY** Physical hazard (flammable or reactive)**REP** Reproductive**RES** Respiratory sensitization**SKI** Skin sensitization/irritation/corrosivity**UNK** Unknown**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 Unspecified (due to insufficient data)**LT-P1** List Translator Possible 1 (Possible Benchmark-1)**LT-1** List Translator 1 (Likely Benchmark-1)**LT-UNK** 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.)**NoGS** 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.*