

HPD UNIQUE IDENTIFIER: 29561

CLASSIFICATION: 07 26 00 Vapor Retarders

PRODUCT DESCRIPTION: Drago Wrap is specifically engineered to serve as a barrier to volatile organic compounds (VOCs). Through patented and trade secret processes, Drago Wrap combines uniquely designed barrier materials with the flexibility and strength of a high-performance polyolefin film into an easy-to-install barrier against hydrocarbons and chlorinated solvents. It provides Owners, Developers, and Engineers a high-performing solution to transform brownfield sites into healthy built environments. Additional CSI MasterFormat designation: 03 30 00

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

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

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

DRAGO® WRAP VAPOR INTRUSION BARRIER [UNDISCLOSED LT-UNK] | MUL UNDISCLOSED LT-UNK | UNDISCLOSED LT-UNK | CAN UNDISCLOSED LT-UNK | UNDISCLOSED LT-P1 | RES | SKI | MAM | EYE | | MUL | PHY | AQU | DEV COPPER LT-P1 | RES | GEN | EYE | | MUL | CAN | MAM | SKI | AQU]

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

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

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. *** Drago 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?	PREPARER: Self-Prepared	SCREENING DATE: 2022-07-27
☐ Yes	VERIFIER:	PUBLISHED DATE: 2022-08-11
☒ No	VERIFICATION #:	EXPIRY DATE: 2025-07-27

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-07-29 11:02:12		
?: 0.0000 - 95.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
	EC - CEPA DSL		Persistent	
CAN	IARC		Group 3 - Agent is not classifiable as to its carcinogenicity to humans	
ADDITIONAL LISTINGS	AGENCY		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	
SUBSTANCE NOTES: The polyethylene blend, which provides the physical structure of the material and lends the product its specialized performance characteristics, represents a Trade Secret.				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-07-29 11:02:35		
?: 0.0000 - 20.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species
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: The polyethylene blend, which provides the physical structure of the material and lends the product its specialized performance characteristics, represents a Trade Secret.				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-07-29 11:03:11		
?: 0.0000 - 20.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Processing regulator
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
RES	AOEC - Asthmagens		Asthmagen (Rs) - sensitizer-induced	
RES	MAK		Sensitizing Substance Sah - Danger of airway & skin sensitization	
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1		H317 - May cause an allergic skin reaction [Skin sensitization - Category 1]	
RES	EU - GHS (H-Statements) Annex 6 Table 3-1		H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled [Respiratory sensitization - Category 1]	
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1		H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]	

MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]
MAM	GHS - Australia	H302 - Harmful if swallowed [Acute toxicity (oral) - Category 4]
MAM	GHS - New Zealand	Acute oral toxicity category 4
	EC - CEPA DSL	Persistent
MUL	Québec CSST - WHMIS 1988	Class D2A - Very toxic material causing other toxic effects
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MUL	EC - CEPA DSL	Inherently Toxic to Humans (iTH)
MUL	German FEA - Substances Hazardous to Waters	Class 1 - Low Hazard to Waters
MUL	Québec CSST - WHMIS 1988	Class D2B - Toxic material causing other toxic effects
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H302 - Harmful if swallowed [Acute toxicity (oral) - Category 4]
MAM	Québec CSST - WHMIS 1988	Class D1B - Toxic material causing immediate and serious toxic effects
PHY	Québec CSST - WHMIS 1988	Class E - Corrosive materials
SKI	GHS - New Zealand	Skin corrosion category 1C
EYE	GHS - New Zealand	Serious eye damage category 1
AQU	GHS - Japan	H402 - Harmful to aquatic life [Hazardous to the aquatic environment (acute) - Category 3]
EYE	GHS - Japan	H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]
SKI	GHS - Japan	H314 - Causes severe skin burns and eye damage [Skin corrosion / irritation - Category 1]
SKI	GHS - Japan	H317 - May cause an allergic skin reaction [Skin sensitizer - Category 1]
SKI	GHS - Australia	H317 - May cause an allergic skin reaction [Skin sensitization - Category 1]
SKI	GHS - Australia	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]
DEV	MAK	Pregnancy Risk Group C
SKI	GHS - New Zealand	Skin sensitisation category 1
RES	GHS - New Zealand	Respiratory sensitisation category 1

RES	GHS - Japan	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled [Respiratory sensitizer - Category 1]
MAM	GHS - Japan	H302 - Harmful if swallowed [Acute Toxicity (oral) - Category 4]
MAM	GHS - Australia	H335 - May cause respiratory irritation [Specific target organ toxicity - single exposure; Respiratory tract irritation - Category 3]
AQU	GHS - Japan	H412 - Harmful to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 3]
SKI	GHS - Malaysia	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]
EYE	GHS - Malaysia	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]
MAM	GHS - Australia	H311 - Toxic in contact with skin [Acute toxicity (dermal) - Category 3]
SKI	GHS - Malaysia	H317 - May cause an allergic skin reaction [Skin sensitization - Category 1]
RES	GHS - Australia	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled [Respiratory sensitization - Category 1]
MAM	GHS - Malaysia	H302 - Harmful if swallowed [Acute toxicity (oral) - Category 4]
RES	GHS - Malaysia	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled [Respiratory sensitization - Category 1]
ADDITIONAL LISTINGS	AGENCY	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List
Precautionary list of substances recommended for avoidance		

SUBSTANCE NOTES: The additive to the film, which provides the physical structure of the material and lends the product its specialized performance characteristics, represents a Trade Secret.

COPPER				ID: 7440-50-8
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-07-29 11:04:47		
%: 0.0000 - 10.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Conductor

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
GEN	GHS - New Zealand	Germ cell mutagenicity category 1
EYE	GHS - New Zealand	Eye irritation category 2
	EC - CEPA DSL	Persistent
MUL	EC - CEPA DSL	Inherently Toxic to Humans (iTH)
CAN	US EPA - IRIS Carcinogens	(1986) Group D - Not classifiable as to human carcinogenicity
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - New Zealand	Skin sensitisation category 1
SKI	GHS - Japan	H317 - May cause an allergic skin reaction [Skin Sensitization - Category 1A]
MAM	GHS - New Zealand	Acute inhalation toxicity category 2
MAM	GHS - New Zealand	Acute oral toxicity category 2
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 2
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 2
ADDITIONAL LISTINGS	AGENCY	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance
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	International Living Future Institute (ILFI)	Living Building Challenge 4.0 - Red List of Materials & Chemicals Watch List Substances Considered for Inclusion in the Living Building Challenge Red List
SUBSTANCE NOTES: This component, which provides the physical properties of the material and lends the product its specialized performance characteristics, represents a Trade Secret.		

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: 2022-07-27	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.

DRAGOSEAL® 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.

DRAGO® MASTIC

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.

DRAGOTACK® 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.

DRAGO® 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.

DRAGO® 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.

Section 5: General Notes

Drago Wrap Vapor Intrusion Barrier is a multi-layered plastic extrusion that combines uniquely designed materials with only high grade, prime, virgin resins. This game-changing barrier technology provides high performance and longevity, allowing for the redevelopment of brownfield and contaminated sites, creating a healthy built environment. ||

******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/drago-wrap>

CONTACT NAME: Page Cotton
TITLE: Product Manager
PHONE: (877) 464-7834
EMAIL: pagecotton@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

