Drago® Mastic
by Stego Industries, LLC

Health Product Declaration v2.3

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 31604
CLASSIFICATION: 07 26 00 Vapor Retarders
PRODUCT DESCRIPTION: Drago Mastic is designed to be used as a vapor intrusion membrane in conjunction with Drago Wrap Vapor Intrusion Barrier. Drago Mastic can be used for sealing utility, pipe penetrations, and sealing terminating edges to create a quality installation that greatly resists the ingress of moisture and other gases. Additional CSI MasterFormat designation: 03 30 00

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.

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® MASTIC [ASPHALT LT-1 | CAN | | MAM | MUL | GEN | DEV | EYE WATER BM-4 ELASTOMERIC POLYMER Not Screened STODDARD SOLVENT LT-1 | CAN | MUL | GEN | MAM | | PHY | SKI | NEU | AQU ADDITIVE 1 Not Screened ADDITIVE 2 Not Screened ADDITIVE 3 Not Screened ADDITIVE 4 Not Screened]

Number of Greenscreen BM-4/BM3 contents ... 1

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... 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. *** Drago Wrap contains no VOC's.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): 16 Regulatory (g/l): 250
Does the product contain exempt VOCs: No
Are colorants available that do not increase the VOC content of the base paint when tinted: N/A

CERTIFICATIONS AND COMPLIANCE *See Section 3 for additional listings.*

VOC emissions: CDPH Standard Method V1.2 (Section 01350/CHPS) - Classroom & Office scenario
VOC content: CDPH Standard Method V1.2 (Section 01350/CHPS) - Classroom & Office scenario

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?
- ○ Yes
- ◉ No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2022-07-27
PUBLISHED DATE: 2023-03-06
EXPIRY DATE: 2025-07-27

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

DRAGO® MASTIC

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

RESIDUALS AND IMPURITIES NOTES: **Residuals have not been quantified. Efforts are made to ensure that no undesired residuals or impurities remain in the final product, but no additional tests are undertaken to measure potential residual content.**

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

ASPHALT

ID: **8052-42-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-07-27 14:26:36**

%: **50.0000 - 65.0000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Sealant**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
CAN	IARC	Group 2b - Possibly carcinogenic to humans
	EC - CEPA DSL	Persistent
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
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)
GEN	GHS - Japan	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
DEV	MAK	Pregnancy Risk Group D
MAM	GHS - Japan	H335 or H336 [Specific target organs/systemic toxicity following single exposure - Category 3]
EYE	GHS - Japan	H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

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

WATER

ID: 7732-18-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-09 20:51:05**

%: **20.0000 - 45.0000** GreenScreen: **BM-4** RC: **None** NANO: **No** SUBSTANCE ROLE: **Carrier**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex IV listing due to intrinsic safety

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

ELASTOMERIC POLYMER

ID: Unknown

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **Not Screened**

%: **0.0000 - 20.0000** GreenScreen: **Not Screened** RC: **None** NANO: **No** SUBSTANCE ROLE: **Polymer species**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
	Hazard Screening not performed	

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
	Additional Hazard Screening not performed	

SUBSTANCE NOTES: The supplier has only identified this substance as an elastomeric polymer due to the fact that it is a proprietary component of the product and it represents a Trade Secret. To the best of their knowledge and research, there are no known hazards or warnings associated with this material. Variation in processing necessitates that a range of values be reported for this substance.

STODDARD SOLVENT

ID: 8052-41-3

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-07-27 14:30:24**

%: **0.0000 - 5.0000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Solvent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
CAN	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
GEN	EU - REACH Annex XVII CMRs	Mutagen Category 2 - Substances which should be regarded as if they are Mutagenic to man
GEN	EU - Annex VI CMRs	Mutagen - Category 1B

CAN	GHS - Australia	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
GEN	GHS - Australia	H340 - May cause genetic defects [Germ cell mutagenicity - Category 1A or 1B]
CAN	GHS - Malaysia	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
GEN	GHS - Malaysia	H340 - May cause genetic defects [Germ cell mutagenicity - Category 1A or 1B]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
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]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H304 - May be fatal if swallowed and enters airways [Aspiration hazard - Category 1]
GEN	EU - GHS (H-Statements) Annex 6 Table 3-1	H340 - May cause genetic defects [Germ cell mutagenicity - Category 1A or 1B]
MUL	EC - CEPA DSL	Inherently Toxic to Humans (iTH)
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
MUL	Québec CSST - WHMIS 1988	Class D2B - Toxic material causing other toxic effects
	EC - CEPA DSL	Bioaccumulative
PHY	Québec CSST - WHMIS 1988	Class B3 - Combustible liquids
MAM	GHS - Japan	H373 - May cause damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 2]
MAM	GHS - Japan	H335 or H336 [Specific target organs/systemic toxicity following single exposure - Category 3]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
NEU	Boyes - Neurotoxicants	Neurotoxic
AQU	GHS - Japan	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Japan	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
MUL	EC - CEPA DSL	Inherently Toxic in the Environment (iTE)

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

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

ADDITIVE 1 ID: **Unknown**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **Not Screened**

%: **0.0000 - 2.0000** GreenScreen: **Not Screened** RC: **None** NANO: **No** SUBSTANCE ROLE: **Viscosity modifier**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
	Hazard Screening not performed	

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
	Additional Hazard Screening not performed	

SUBSTANCE NOTES: The supplier has only identified this substance as a rheology enhancer to the fact that it is a proprietary component of the product and it represents a Trade Secret. To the best of their knowledge and research, there are no known hazards or warnings associated with this material. Variation in processing necessitates that a range of values be reported for the mass percentage for this substance.

ADDITIVE 2

ID: **Unknown**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **Not Screened**

%: **0.0000 - 1.0000** GreenScreen: **Not Screened** RC: **None** NANO: **No** SUBSTANCE ROLE: **Emulsifier**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
	Hazard Screening not performed	

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
	Additional Hazard Screening not performed	

SUBSTANCE NOTES: The supplier has only identified this substance as an emulsifier due to the fact that it is a proprietary component of the product and it represents a Trade Secret. To the best of their knowledge and research, there are no known hazards or warnings associated with this material. Variation in processing necessitates that a range of values be reported for the mass percentage for this substance.

ADDITIVE 3

ID: **Unknown**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **Not Screened**

%: **0.0000 - 1.0000** GreenScreen: **Not Screened** RC: **None** NANO: **No** SUBSTANCE ROLE: **Stabilizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
	Hazard Screening not performed	

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
	Additional Hazard Screening not performed	

SUBSTANCE NOTES: The supplier has only identified this substance as a stabilizer due to the fact that it is a proprietary component of the product and it represents a Trade Secret. To the best of their knowledge and research, there are no known hazards or warnings associated with this material. Variation in processing necessitates that a range of values be reported for the mass percentage for this substance.

ADDITIVE 4

ID: **Unknown**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **Not Screened**

%: **0.0000 - 1.0000** GreenScreen: **Not Screened** RC: **None** NANO: **No** SUBSTANCE ROLE: **Stabilizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
	Hazard Screening not performed	

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
	Additional Hazard Screening not performed	

SUBSTANCE NOTES: **The supplier has only identified this substance as a preservative due to the fact that it is a proprietary component of the product and it represents a Trade Secret. To the best of their knowledge and research, there are no known hazards or warnings associated with this material. Variation in processing necessitates that a range of values be reported for the mass percentage for this substance.**

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 V1.2 (Section 01350/CHPS) - Classroom & Office scenario**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: All
CERTIFICATE URL: https://sustainabilitydirectory.intertek.com/product/961dc555-da1e-4e85-2ed8-08d8e7ea2977

ISSUE DATE: 2022-03-09
EXPIRY DATE: 2023-03-09

CERTIFIER OR LAB: Intertek

CERTIFICATION AND COMPLIANCE NOTES: Product Category: Adhesives and Sealants Product Restrictions: None TVOC Range*: Between 0.5 and 5.0 mg/m3 *TVOC range stated is based on the most stringent modeling scenario as listed in the Conformance Criteria

VOC CONTENT — **CDPH Standard Method V1.2 (Section 01350/CHPS) - Classroom & Office scenario**

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: All
CERTIFICATE URL:

ISSUE DATE: 2022-07-26
EXPIRY DATE:

CERTIFIER OR LAB: None

CERTIFICATION AND COMPLIANCE NOTES: VOC content is based upon analysis of the ingredients/substances utilized using EPA Method 24.

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

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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Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Stego Industries, LLC**
ADDRESS: **216 Avenida Fabricante**
Suite 101
San Clemente California 92672, USA
WEBSITE: **https://www.stegoindustries.com/products/drago-mastic**

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
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
NoGS No GreenScreen.

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.