

HPD UNIQUE IDENTIFIER: (available when published)

CLASSIFICATION: 09 78 00 Interior Wall Paneling

PRODUCT DESCRIPTION: Clayworks Clay Plasters are natural and breathable interior wall finishes that can be used as a healthy and sustainable alternative to other plasters and paint. Naturally pigmented, they come in a wide range of colours and textures and are available worldwide.

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

- Considered
- Partially Considered
- Not Considered

Explanation(s) provided for Residuals/Impurities?

- Yes
- No

All Substances Above the Threshold Indicated Are:

Characterized Yes Ex/SC Yes No

% weight and role provided for all substances except SC substances characterized according to SC guidance.

Screened Yes Ex/SC Yes No

All substances screened using Priority Hazard Lists with results disclosed except SC substances screened according to SC guidance.

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

CLAYWORKS SMOOTH CLAY PLASTERS [UNDISCLOSED NoGS
UNDISCLOSED BM-1 | CAN KAOLIN LT-UNK | CAN UNDISCLOSED LT-
UNK UNDISCLOSED LT-UNK | CAN UNDISCLOSED LT-UNK | RES
SC:UNDISCLOSED Not Screened SC:BLENDING SAND Not Screened
UNDISCLOSED LT-UNK | RES SC:UNDISCLOSED Not Screened]

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

Contents highest concern GreenScreen Benchmark or List translator Score ... BM-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Special conditions applied: GeologicalMaterial

[LEED v4] "Yes ex/SC" result is due only to materials and substances for which Special Conditions were applied. Thus "Yes ex/SC" does not disqualify the product for the LEED v4 Materials and Resources Disclosure and Optimization credit, Option 1.

Clayworks worked with the HPDC Approved Preparer to confirm that all intentionally added ingredients, residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold.

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: Eurofins Confirmation LEEDv4 EQ - Low emitting products

VOC content: EN 233:1999 - Wallcoverings in roll form - finished - BREEAM compliant

LCA: Environmental Product Declaration (EPD)

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

- Yes
- No

PREPARER: ToxServices LLC

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2021-10-27

PUBLISHED DATE: 2021-11-16

EXPIRY DATE: 2024-10-27

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

CLAYWORKS SMOOTH CLAY PLASTERS

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Clayworks worked with the HPDC Approved Preparer to confirm that all residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold.

OTHER PRODUCT NOTES:

UNDISCLOSED

ID: **Undisclosed**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-11-11 11:50:34**

#: **8.3045 - 9.7602** GS: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 2

UNDISCLOSED

ID: **Undisclosed**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-11-09 10:59:41**

#: **5.9763 - 72.1289** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	US NIH - Report on Carcinogens	Known to be Human Carcinogen (respirable size - occupational setting)
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CAN	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
CAN	IARC	Group 1 - Agent is Carcinogenic to humans
CAN	GHS - New Zealand	6.7A - Known or presumed human carcinogens
CAN	GHS - Japan	H350 - May cause cancer [Carcinogenicity - Category 1A]
CAN	GHS - Australia	H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]

SUBSTANCE NOTES: The GreenScreen® Benchmark assessment score of BM-1 was provided through the HPD 2.2 Builder Tool. This material serves as a component in the sand mixture and an impurity in other materials/minerals such as dolomite, feldspar, and kaolin

KAOLIN

ID: 1332-58-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-11-04 10:54:30**

#: **3.8300 - 3.8300** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES:

UNDISCLOSED

ID: **Undisclosed**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-11-11 11:51:26**

#: **1.8042 - 1.9400** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 4

UNDISCLOSED

ID: **Undisclosed**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-11-11 11:53:22**

#: **0.9600 - 0.9600** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 5

UNDISCLOSED

ID: **Undisclosed**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-11-11 11:54:44**

#: **0.4800 - 0.4800** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **Not Screened**%: **0.0098 - 1.4655** GS: **Not Screened** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

Hazard Screening not performed

SUBSTANCE NOTES:

Version: SCGeoMats/2019-06-20

Origin: England

Typical Composition: Silica and clay contaminants

Potential presence of toxic metals: This disclosure does not provide information on the potential presence of toxic metals.

Presence of Radioactive Elements: This disclosure does not provide radioactive elements which may be found in certain geological materials. 8

SC:BLEND ED SAND

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **Not Screened**%: **0.0000 - 65.0000** GS: **Not Screened** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

Hazard Screening not performed

SUBSTANCE NOTES:

Version: SCGeoMats/2019-06-20

Origin: United Kingdom

Typical Composition: Blend of Flint, Sandstone, Limestone, Slate, Granite

Potential presence of toxic metals: N/A

Presence of Radioactive Elements: N/A

UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-11-11 11:55:43**%: **0.0000 - 6.7716** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

RES AOEC - Asthmagens Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 3

SC:UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **Not Screened**%: **0.0000 - 4.7900** GS: **Not Screened** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

Hazard Screening not performed

SUBSTANCE NOTES:

Version: SCGeoMats/2019-06-20

Origin: England

Typical Composition: Up to 100% Hydrous Aluminium Silicate

Potential presence of toxic metals: This disclosure does not provide information on the potential presence of toxic metals.

Presence of Radioactive Elements: This disclosure does not provide radioactive elements which may be found in certain geological materials. 7

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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

Eurofins Confirmation LEEDv4 EQ - Low emitting products

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: All Facilities
CERTIFICATE URL:

ISSUE DATE: 2021-10-29 EXPIRY DATE: CERTIFIER OR LAB: Eurofins

CERTIFICATION AND COMPLIANCE NOTES: The requirements of LEED v4 and LEED v4.1 BETA (February 2021): CDPH-IAQ (California Department of Public Health (CDPH) Standard Method v1.2-2017); and a TVOC below 0.5 mg/m³ in both office and classroom.

VOC CONTENT

EN 233:1999 - Wallcoverings in roll form - finished - BREEAM compliant

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: All Facilities
CERTIFICATE URL:

ISSUE DATE: 2021-10-29 EXPIRY DATE: CERTIFIER OR LAB: Eurofins

CERTIFICATION AND COMPLIANCE NOTES: BREEAM International: Compliance with Exemplary criteria on both VOC emission and VOC content of BREEAM International: New Construction 2016, Technical Manual: Hea 02 Indoor Air Quality (version SD233 issue 2.0 of July 2017)

LCA

Environmental Product Declaration (EPD)

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: All Facilities
CERTIFICATE URL:

ISSUE DATE: 2020-09-11 EXPIRY DATE: 2025-09-11 CERTIFIER OR LAB: EPD International AB

CERTIFICATION AND COMPLIANCE NOTES: Product category rules (PCR): PCR 2012:01. Construction Products. Version 2.33. (date 2020-09-18, valid until 2021-12-31). Sub-PCR-A Mortars Applied to a Surface. UN CPC Code 154000 (clays) (date 2020-09-18, valid until 2021-12-31)

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

Clayworks worked with the HPDC Approved Preparer to confirm that all intentionally added ingredients, residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold.

MANUFACTURER INFORMATION

MANUFACTURER: Clayworks
 ADDRESS: Higher Bochym Rural Workshops Cury Cross Lanes
 Unit 5
 Helston Cornwall TR12 7AZ, UK
 WEBSITE: https://clay-works.com/wp-content/uploads/2021/05/clayworks_environmental_product_declaration.pdf

CONTACT NAME: Clare Whitney
 TITLE: Sustainability Manager
 PHONE: 44 (0)1326 341339
 EMAIL: clare@clay-works.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-1 List Translator 1 (Likely Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	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.)
BM-2 Benchmark 2 (use but search for safer substitutes)	NoGS No GreenScreen.
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)	

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.