## Bondplast <br> by Armourcoat Ltd

Health Product

HPD UNIQUE IDENTIFIER: 25817
CLASSIFICATION: 092300 Gypsum Plastering
PRODUCT DESCRIPTION: Bondplast is a Gypsum based adhesive used for bonding panels to walls and ceilings. It is used as part of the Armourcoat Acoustic system for bonding the glasswool panels to the ceiling. Bondplast is also used for adhering Sculptural panels. Largely made from recycled materials and with the lowest GWP carbon footprint of all seamless Acoustic plaster systems, Armourcoat is the logical choice for environmentally conscious specifiers. A zero VOC system with a durable surface made from crushed marble , the Armourcoat seamless plaster can be appled in a wide range of colours to flat, curved, vaulted and domed surfaces. Moisture , mold and mildew resistant the Armourcoat finish can also be used in humid areas like spas and indoor pool areas.

## 三 Section 1: Summary

## CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method

○ Basic Method
Threshold Disclosed Per
O Material

- Product

Threshold level
© 100 ppm

- 1,000 ppm
- Per GHS SDS

O Other

Residuals/Impurities
Residuals/lmpurities
Considered in 10 of 5 Materials
Explanation(s) provided
for Residuals/Impurities? © Yes $\circ$ No

All Substances Above the Threshold Indicated Are: Characterized O Yes Ex/SC © Yes O No<br>\% weight and role provided for all substances. Screened O Yes Ex/SC © Yes O No<br>All substances screened using Priority Hazard Lists with results disclosed.<br>Identified O Yes Ex/SC ○ Yes © No<br>One or more substances not disclosed by Name<br>(Specific or Generic) and Identifier andl 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
GYPSUM HEMI-HYDRATE [ PLASTER OF PARIS NoGS CLAYNoGS ] POWDER POLYMER [ UNDISCLOSED LT-UNK DOLOMITE NOGS CALCIUM CARBONATE BM-3 ] HYDRATED LIME [ CALCIUM HYDROXIDE LT-P1 ] METHYL CELLULOSE [ HYDROXYPROPYL METHYLCELLULOSE LT-UNK ] UNDISCLOSED [ CITRIC ACID LT-UNK ]

Number of Greenscreen BM-4/BM3 contents ... 1
Contents highest concern GreenScreen
Benchmark or List translator Score ... LT-P1
Nanomaterial ... No
INVENTORY AND SCREENING NOTES:
This Health Product declaration (HPD) was completed in accordance with the HPD Standard Version 2.2 and discloses hazards associated with all substances present at or above 1000 parts per million (ppm) in the finished product along with the role and percentage weight therefore Therefore, this HPD qualifies for the LEED v4 MR credit Building Product Disclosure and Optimization: Material Ingredient Reporting (Option 1). Substances not "Identified" arethose considered proprietary to suppliers, and thus are "Undisclosed" on this HPD.

## CERTIFICATIONS AND COMPLIANCE See Section 3 for additional

 listings.VOC emissions: Eurofins Indoor Air Comfort - certified product

## CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

## VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

## \& 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

```
GYPSUM HEMI-HYDRATE
\%: 92.0000-96.0000
```

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: Partially MATERIAL TYPE: Geologically Derived Material RESIDUALS AND IMPURITIES NOTES: Gypsum plaster will have small amounts of clay impurities that affect the colour of the gypsum mineral OTHER MATERIAL NOTES:
PLASTER OF PARIS ID: 26499-65-0

| HAZARD SCREENING METHOD: | Pharos Chemical and Materials Library | HAZARD SCREENING DATE: 2021-08-10 16:27:55 |  |
| :--- | :---: | :---: | :---: |
| \%: $\mathbf{9 2 . 0 0 0 0} \mathbf{- 9 6 . 0 0 0 0}$ | GS: NoGS | RC: None | NANO: No |
| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |  |

None found
No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

CLAY ID: 1302-87-0

| HAZARD SCREENING METHOD: | Pharos Chemical and Materials Library | HAZARD SCREENING DATE: 2021-08-10 16:27:56 |
| :--- | :--- | :--- | :--- |
| \%: Impurity/Residual GS: NoGS RC: None |  |  | HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

None found
No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: When the gypsum is mined it is in strata within layers of marl clay and it is not possible in the manufacturing process to remove all traces of clay
POWDER POLYMER $\quad \%: 2.0000-4.0000$
PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: Partially MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: Powder polymer contains a small proportion of calcium as an anti caking agent
OTHER MATERIAL NOTES:

| HAZARD SCREENING METHOD: Pharos Chemical and Materials Library | HAZARD SCREENING DATE: 2021-08-10 16:27:56 |  |  |
| :--- | :---: | :---: | :---: |
| \%: 2.0000 - 4.0000 | GS: LT-UNK | RC: None | NANO: No |
| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |  |
| None found |  | No warnings found on HPD Priority Hazard Lists |  |

SUBSTANCE NOTES: Powder polymer used to improve bonding and adhesion
DOLOMITE $\quad$ ID: 16389-88-1

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

| \%: Impurity/Residual | GS: NoGS | RC: None |  |
| :--- | :---: | :---: | :---: |
| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |  |

None found No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Dolomite is added to powder polymer to prevent clumping of the dry polymer powder

## CALCIUM CARBONATE

ID: 471-34-1

| HAZARD SCREENING METHOD: | Pharos Chemical and Materials Library | HAZARD SCREENING DATE: 2021-08-16 13:27:54 |
| :--- | :---: | :---: | :---: |
| \%: Impurity/Residual GS: BM-3 RC: None <br> HAZARD TYPE AGENCY AND LIST TITLES WARNINGS |  |  |

None found No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This is an anti caking agent that is incorporated into the powder polymer to inhibit clumping.

HYDRATED LIME
\%: 0.5000-2.0000
PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: Partially MATERIAL TYPE: Geologically Derived Material RESIDUALS AND IMPURITIES NOTES: Hydrated lime will contain trace elements of calcium carbonate and clay OTHER MATERIAL NOTES:

CALCIUM HYDROXIDE
ID: 1305-62-0

| HAZARD SCREENING METHOD: | Pharos Chemical and Materials Library | HAZARD S | EENING DA | 2021-08-10 16:27:56 |
| :---: | :---: | :---: | :---: | :---: |
| \%: 0.5000-2.0000 | GS: LT-P1 | RC: None | NANO: No | SUBSTANCE ROLE: Buffer |
| HAZARD TYPE | AGENCY AND LIST TITLES | WAR | NGS |  |
| None found |  | No warnings found on HPD Priority Hazard Lists |  |  |

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: Partially MATERIAL TYPE: Other Biological Material RESIDUALS AND IMPURITIES NOTES: Methyl cellulose is manufactured from wood cellulose and contains little or no impurities OTHER MATERIAL NOTES:

HYDROXYPROPYL METHYLCELLULOSE
ID: 9004-65-3

| HAZARD SCREENING METHOD: | Pharos Chemical and Materials Library | HAZARD SCREENING DATE: 2021-08-10 16:27:57 |  |
| :--- | :---: | :---: | :---: |
| $\%: \mathbf{0 . 3 0 0 0} \mathbf{- 0 . 6 0 0 0}$ | GS: LT-UNK | RC: None |  |
| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |  |

None found
No warnings found on HPD Priority Hazard Lists

## SUBSTANCE NOTES:

| UNDISCLOSED \%: 0.1000-0.1000 |  |  |  |
| :---: | :---: | :---: | :---: |
| PRODUCT THRESHOLD: 1000 ppm | RESIDUALS AND IMPURITIES CONSIDERED: Partially |  | MATERIAL TYPE: Other Biological Material |
| RESIDUALS AND IMPURITIES NOTES: we are using a food grade citric acid and it is meant to have 99.9\%purity |  |  |  |
| OTHER MATERIAL NOTES: |  |  |  |
| CITRIC ACID |  |  | ID: 77-92-9 |
| HAZARD SCREENING METHOD: | Pharos Chemical and Materials Library | HAZARD SCREENING DATE: 2021-08-10 16:27:58 |  |
| \%: 0.0800-0.1100 | GS: LT-UNK | RC: None NANO: No | SUBSTANCE ROLE: Processing regulator |
| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |  |
| None found |  | No w | rnings found on HPD Priority Hazard Lists |

SUBSTANCE NOTES: Citric acid is a set retarder for the gypsum and the addition level is varied within a small range

## @ 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 Indoor Air Comfort - certified product

| CERTIFYING PARTY: Third Party | ISSUE DATE: 2021-08- | EXPIRY DATE: | CERTIFIER OR LAB: Eurofins |
| :--- | :--- | :--- | :--- |
| APPLICABLE FACILITIES: Eurofins Product testing A/S | 12 |  |  |
| CERTIFICATE URL: |  |  |  |
| CERTIFICATION AND COMPLIANCE NOTES: Indoor air comfort tested on the entire Armourcoat Acoustic system of which the Bondplast is a |  |  |  |
| component. |  |  |  |

## + 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.
ARMOURCOAT ACOUSTIC TOPCOAT AP335 HPD URL: No HPD available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:
Installation of Armourcoat Acoustic plaster system

ARMOURCOAT ACOUSTIC BOARDS
HPD URL: No HPD available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:
Installation of Armourcoat Acoustic plaster system

## 日 Section 5: General Notes

## MANUFACTURER INFORMATION

MANUFACTURER: Armourcoat Ltd<br>ADDRESS: Armourcoat Ltd<br>Unit 2\&3 Morewood Close<br>Sevenoaks Kent TN132HU, UK<br>WEBSITE: www.armourcoat.co.uk

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 andlor 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.

