Optima PB (Plant Based) HealthZone Ceiling System
by Armstrong World Industries

Health Product Declaration v2.2
created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 21749
CLASSIFICATION: 09 51 00 Acoustical Ceilings
PRODUCT DESCRIPTION: Smooth-textured Optima panels provide excellent acoustical absorption and more standard-size options than any other texture in the line. This absorptive ceiling panel meets USDA/FSIS guidelines for use in food preparation/kitchens, and Clean Room assemblies; and exceeds FGI Guidelines for acoustics and cleanability in general healthcare spaces.

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

All Substances Above the Threshold Indicated Are:
- Characterized: Yes Ex/SC Yes No
  % weight and role provided for all substances.
- Screened: Yes Ex/SC Yes No
  All substances screened using Priority Hazard Lists with results disclosed.
- Identified: Yes Ex/SC Yes No
  All substances disclosed by Name (Specific or Generic) and 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.

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY | GREENSCREEN SCORE | HAZARD TYPE
OPTIMA PB (PLANT BASED) HEALTHZONE CEILING SYSTEM [ FIBERGLASS LT-UNK STARCH NoGS CALCIUM CARBONATE LT-UNK CALCIUM MAGNESIUM CARBONATE NoGS CALCIUM CARBONATE BM-3 POLYVINYL ACETATE LT-UNK TITANIUM DIOXIDE LT-1 | CAN | END VEGETABLE OIL NoGS ALUMINUM TRIHYDRATE BM-2 POLYVINYL ALCOHOL LT-UNK PLASTICIZER LT-F1 | MUL MICA LT-UNK SODA ASH LT-UNK FATTY OIL NoGS WATER REPELLENT NoGS ]

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: UL/GreenGuard Gold Certified
LCA: Environmental Product Declaration (EPD) by UL - Industry Generic
Other: ILFI Declare - LBC Compliant

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients Option 1

Third Party Verified?
- Yes
- No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:
SCREENING DATE: 2020-09-17
PUBLISHED DATE: 2020-09-17
EXPIRY DATE: 2023-09-17
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

### OPTIMA PB (PLANT BASED) HEALTHZONE CEILING SYSTEM

**PRODUCT THRESHOLD:** 1000 ppm  
**RESIDUALS AND IMPURITIES CONSIDERED:** Yes

**RESIDUALS AND IMPURITIES NOTES:** Residuals / impurities in select raw materials are quantitatively measured and are displayed in the HPD when greater than 1000ppm.

**OTHER PRODUCT NOTES:** For more information on Armstrong Optima PB HealthZone, visit https://www.armstrongceilings.com/commercial/en-us/commercial-ceilings-walls/optima-health-zone-ceiling-tiles.html

### FIBERGLASS

**ID:** 65997-17-3  
**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2020-09-17  
**%:** 65.0000 - 85.0000  
**GS:** LT-UNK  
**RC:** Both  
**NANO:** Unknown  
**SUBSTANCE ROLE:** Structure component

**HAZARD TYPE**  
None found

**AGENCY AND LIST TITLES**  
No warnings found on HPD Priority Hazard Lists

**WARNINGS**  
No warnings found on HPD Priority Hazard Lists

**SUBSTANCE NOTES:** base material

### STARCH

**ID:** 60323-79-7  
**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2020-09-17  
**%:** 5.0000 - 10.0000  
**GS:** NoGS  
**RC:** PostC  
**NANO:** Unknown  
**SUBSTANCE ROLE:** Binder

**HAZARD TYPE**  
None found

**AGENCY AND LIST TITLES**  
No warnings found on HPD Priority Hazard Lists

**WARNINGS**  
No warnings found on HPD Priority Hazard Lists

**SUBSTANCE NOTES:** binder

### CALCIUM CARBONATE

**ID:** 1317-65-3  
**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2020-09-17  
**%:** 0.0000 - 15.0000  
**GS:** LT-UNK  
**RC:** None  
**NANO:** Unknown  
**SUBSTANCE ROLE:** Filler

**HAZARD TYPE**  
None found

**AGENCY AND LIST TITLES**  
No warnings found on HPD Priority Hazard Lists

**WARNINGS**  
No warnings found on HPD Priority Hazard Lists

**SUBSTANCE NOTES:** base material
<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>None found</td>
<td></td>
<td>No warnings found on HPD Priority Hazard Lists</td>
</tr>
</tbody>
</table>

**Substance Notes:** Filler

---

### Calcium Magnesium Carbonate

**ID:** 16389-88-1

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library

**HAZARD SCREENING DATE:** 2020-09-17

**%:** 0.0000 - 5.0000

**GS:** NoGS

**RC:** None

**NANO:** Unknown

**SUBSTANCE ROLE:** Filler

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### Calcium Carbonate

**ID:** 471-34-1

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library

**HAZARD SCREENING DATE:** 2020-09-17

**%:** 0.0000 - 5.0000

**GS:** BM-3

**RC:** None

**NANO:** Unknown

**SUBSTANCE ROLE:** Filler

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### Polyvinyl Acetate

**ID:** 9003-20-7

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library

**HAZARD SCREENING DATE:** 2020-09-17

**%:** 0.0000 - 5.0000

**GS:** LT-UNK

**RC:** None

**NANO:** No

**SUBSTANCE ROLE:** Adhesive

**Substance Notes:** In this product it is not regulated as a hazardous substance. In this product, it is not a registered pesticide under FIFRA. It is not registered persistent material.

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### Titanium Dioxide

**ID:** 13463-67-7

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library

**HAZARD SCREENING DATE:** 2020-09-17

**%:** 0.0000 - 5.0000

**GS:** LT-1

**RC:** None

**NANO:** Unknown

**SUBSTANCE ROLE:** Pigment
<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CANCER</td>
<td>US CDC - Occupational Carcinogens</td>
<td>Occupational Carcinogen</td>
</tr>
<tr>
<td>CANCER</td>
<td>CA EPA - Prop 65</td>
<td>Carcinogen - specific to chemical form or exposure route</td>
</tr>
<tr>
<td>CANCER</td>
<td>IARC</td>
<td>Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources</td>
</tr>
<tr>
<td>ENDOCRINE</td>
<td>TEDX - Potential Endocrine Disruptors</td>
<td>Potential Endocrine Disruptor</td>
</tr>
<tr>
<td>CANCER</td>
<td>MAK</td>
<td>Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value</td>
</tr>
<tr>
<td>CANCER</td>
<td>MAK</td>
<td>Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels</td>
</tr>
</tbody>
</table>

SUBSTANCE NOTES: Pigment. This ingredient is not in respirable form in this product. It is bound in the coating.

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**VEGETABLE OIL**

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE: 2020-09-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 0.0000 - 5.0000</td>
<td>GS: NoGS</td>
</tr>
<tr>
<td></td>
<td>RC: None</td>
</tr>
<tr>
<td></td>
<td>NANO: Unknown</td>
</tr>
<tr>
<td></td>
<td>SUBSTANCE ROLE: Surface modifier</td>
</tr>
<tr>
<td>HAZARD TYPE</td>
<td>AGENCY AND LIST TITLES</td>
</tr>
</tbody>
</table>
None found                                      No warnings found on HPD Priority Hazard Lists |

SUBSTANCE NOTES: coating

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**ALUMINUM TRIHYDRATE**

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE: 2020-09-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 0.0000 - 5.0000</td>
<td>GS: BM-2</td>
</tr>
<tr>
<td></td>
<td>RC: None</td>
</tr>
<tr>
<td></td>
<td>NANO: Unknown</td>
</tr>
<tr>
<td></td>
<td>SUBSTANCE ROLE: Filler</td>
</tr>
<tr>
<td>HAZARD TYPE</td>
<td>AGENCY AND LIST TITLES</td>
</tr>
</tbody>
</table>
None found                                      No warnings found on HPD Priority Hazard Lists |

SUBSTANCE NOTES: filler

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**POLYVINYL ALCOHOL**

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE: 2020-09-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 0.0000 - 5.0000</td>
<td>GS: LT-UNK</td>
</tr>
<tr>
<td></td>
<td>RC: None</td>
</tr>
<tr>
<td></td>
<td>NANO: No</td>
</tr>
<tr>
<td></td>
<td>SUBSTANCE ROLE: Binder</td>
</tr>
<tr>
<td>HAZARD TYPE</td>
<td>AGENCY AND LIST TITLES</td>
</tr>
</tbody>
</table>
None found                                      No warnings found on HPD Priority Hazard Lists |

SUBSTANCE NOTES: Binder
**PLASTICIZER**

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE: 2020-09-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 0.0000 - 5.0000</td>
<td>GS: LT-P1</td>
</tr>
<tr>
<td></td>
<td>RC: None</td>
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<tr>
<td></td>
<td>NANO: No</td>
</tr>
<tr>
<td>SUBSTANCE ROLE: Adhesive</td>
<td></td>
</tr>
<tr>
<td>HAZARD TYPE AGENCY AND LIST TITLES WARNINGS</td>
<td></td>
</tr>
<tr>
<td>MULTIPLE German FEA - Substances Hazardous to Waters</td>
<td>Class 2 - Hazard to Waters</td>
</tr>
<tr>
<td>SUBSTANCE NOTES: Adhesive</td>
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</tr>
</tbody>
</table>

**MICA**

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE: 2020-09-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 0.0000 - 1.0000</td>
<td>GS: LT-UNK</td>
</tr>
<tr>
<td></td>
<td>RC: None</td>
</tr>
<tr>
<td></td>
<td>NANO: Unknown</td>
</tr>
<tr>
<td>SUBSTANCE ROLE: Filler</td>
<td></td>
</tr>
<tr>
<td>HAZARD TYPE AGENCY AND LIST TITLES WARNINGS</td>
<td></td>
</tr>
<tr>
<td>None found</td>
<td>No warnings found on HPD Priority Hazard Lists</td>
</tr>
<tr>
<td>SUBSTANCE NOTES: It is bound by the adhesives within the coating. It is not in a respirable form in the final product. Accordingly, it is excluded from regulatory hazards list.</td>
<td></td>
</tr>
<tr>
<td>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</td>
<td>HAZARD SCREENING DATE: 2020-09-17</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>%: 0.0000 - 1.0000</td>
<td>GS: NoGS</td>
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<tr>
<td></td>
<td>RC: None</td>
</tr>
<tr>
<td></td>
<td>NANO: Unknown</td>
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<tr>
<td></td>
<td>SUBSTANCE ROLE: Surface modifier</td>
</tr>
<tr>
<td>HAZARD TYPE</td>
<td>AGENCY AND LIST TITLES</td>
</tr>
<tr>
<td>None found</td>
<td>WARNINGS</td>
</tr>
<tr>
<td></td>
<td>No warnings found on HPD Priority Hazard Lists</td>
</tr>
<tr>
<td>SUBSTANCE NOTES: coating ingredient</td>
<td></td>
</tr>
</tbody>
</table>
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

**UL/GreenGuard Gold Certified**

<table>
<thead>
<tr>
<th>CERTIFYING PARTY:</th>
<th>Third Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>all</td>
</tr>
<tr>
<td>ISSUE DATE:</td>
<td>2018-04-16</td>
</tr>
<tr>
<td>EXPIRY DATE:</td>
<td>2021-04-16</td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>UL Environment</td>
</tr>
</tbody>
</table>

**CERTIFICATION AND COMPLIANCE NOTES:** UL GG Gold

### LCA

**Environmental Product Declaration (EPD) by UL - Industry Generic**

<table>
<thead>
<tr>
<th>CERTIFYING PARTY:</th>
<th>Third Party</th>
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</thead>
<tbody>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>all</td>
</tr>
<tr>
<td>ISSUE DATE:</td>
<td>2016-03-31</td>
</tr>
<tr>
<td>EXPIRY DATE:</td>
<td>2021-03-31</td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>UL Environment</td>
</tr>
</tbody>
</table>

**CERTIFICATION AND COMPLIANCE NOTES:** Product Specific EPD

### OTHER

**ILFI Declare - LBC Compliant**

<table>
<thead>
<tr>
<th>CERTIFYING PARTY:</th>
<th>Second Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>all</td>
</tr>
<tr>
<td>ISSUE DATE:</td>
<td>2019-10-01</td>
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<tr>
<td>EXPIRY DATE:</td>
<td>2021-10-01</td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>ILFI</td>
</tr>
</tbody>
</table>

**CERTIFICATION AND COMPLIANCE NOTES:**

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

This HPD is provided solely for the intended recipient in connection with its assessment of products and for no
In providing information, AWI expresses no opinion and makes no representations as to the applicability, suitability, accuracy or completeness of the declaration form, or the standards, rules, classifications, warnings or criteria utilized or referenced therein. Information provided herein is qualified in the entirety by reference to the applicable product Safety Data Sheet (SDS) which can be located at www.armstrongceilings.com, as well as by the additional ingredient information provided for specified substances. Please refer to the Armstrong Commercial Ceilings website for more information on this product.
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.

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hpdrepository.hpd-collaborative.org

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