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**

**ARMSTRONG SUSPENSION SYSTEMS PRELUDE**

| STEEL | LT-UNK | ZINC | LT-PI | AQU | PHY | EN | ALUMINUM | BM-1 | RES | PHY | EN | TITANIUM | DIOXIDE | LT-1 | CAN | END | BARIUM | SULFATE | BM-2 | CAN | NAPHTHA | LT-1 | MAM | GEN | CAN | MUL | ALUMINUM | OXIDE | BM-2 | CAN | RES | SILICA | BM-1 | CAN | BUTANOL | BM-2 | SKI | EYE | ETRIOL | LT-UNK |

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:
Residuals / impurities in select raw materials are quantitatively measured and are displayed in the HPD when greater than 100ppm.

**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: VOC
LCA: Environmental Product Declaration (EPD) by UL
Other: ILFI Declare - Red List Free

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients Option 1

<table>
<thead>
<tr>
<th>Third Party Verified?</th>
<th>PREPARER:</th>
<th>VERIFIER:</th>
<th>VERIFICATION #:</th>
<th>SCREENING DATE:</th>
<th>PUBLISHED DATE:</th>
<th>EXPIRY DATE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Self-Prepared</td>
<td></td>
<td></td>
<td>2020-09-09</td>
<td>2020-09-09</td>
<td>2023-09-09</td>
</tr>
</tbody>
</table>
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](http://www.hpd-collaborative.org/hpd-2-2-standard)

### ARMSTRONG SUSPENSION SYSTEMS PRELUDE

**PRODUCT THRESHOLD:** 100 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 100ppm.

**OTHER PRODUCT NOTES:** For more information on Armstrong Suspension Systems visit: [https://www.armstrongceilings.com/commercial/en-us/suspension-systems.html](https://www.armstrongceilings.com/commercial/en-us/suspension-systems.html)

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>ID</th>
<th>HAZARD SCREENING METHOD</th>
<th>HAZARD SCREENING DATE</th>
<th>%</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>SUBSTANCE ROLE</th>
<th>WARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEEL</td>
<td>65997-19-5</td>
<td>Pharos Chemical and Materials Library</td>
<td>2020-09-09</td>
<td>90.0000 - 100.0000</td>
<td>LT-UNK</td>
<td>Both</td>
<td>Unknown</td>
<td>Structure component</td>
<td>No warnings found on HPD Priority Hazard Lists</td>
</tr>
<tr>
<td>ZINC</td>
<td>7440-66-6</td>
<td>Pharos Chemical and Materials Library</td>
<td>2020-09-09</td>
<td>0.0000 - 10.0000</td>
<td>LT-P1</td>
<td>None</td>
<td>Unknown</td>
<td>Filler</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACUTE AQUATIC</td>
<td>EU - GHS (H-Statements)</td>
<td>H400 - Very toxic to aquatic life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>CHRON AQUATIC</td>
<td>EU - GHS (H-Statements)</td>
<td>H410 - Very toxic to aquatic life with long lasting effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td>EU - GHS (H-Statements)</td>
<td>H250 - Catches fire spontaneously if exposed to air</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td>EU - GHS (H-Statements)</td>
<td>H260 - In contact with water releases flammable gases which may ignite spontaneously</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ENDOCRINE</td>
<td>TEDX - Potential Endocrine Disruptors</td>
<td>Potential Endocrine Disruptor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MULTIPLE</td>
<td>German FEA - Substances Hazardous to Waters</td>
<td>Class 2 - Hazard to Waters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SUBSTANCE NOTES</td>
<td>Base material - NA Recycled steel</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Armstrong Suspension Systems Prelude

hprepository.hpd-collaborative.org
### ALUMINUM

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2020-09-09

**%:** 0.0000 - 10.0000  
**GS:** BM-1  
**RC:** None  
**NANO:** Unknown  
**SUBSTANCE ROLE:** Structure component

<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESPIRATORY</td>
<td>AOEC - Asthmagens</td>
<td>Asthmagen (Rs) - sensitizer-induced</td>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td>EU - GHS (H-Statements)</td>
<td>H250 - Catches fire spontaneously if exposed to air</td>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td>EU - GHS (H-Statements)</td>
<td>H261 - In contact with water releases flammable gases</td>
</tr>
<tr>
<td>ENDOCRINE</td>
<td>TEDX - Potential Endocrine Disruptors</td>
<td>Potential Endocrine Disruptor</td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** Hazards noted pertain to aluminum in a powder or fumigated state. It is an extruded aluminum product. Accordingly, the hazards noted would not pertain to aluminum is this form.

### TITANIUM DIOXIDE

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2020-09-09

**%:** 0.0000 - 5.0000  
**GS:** LT-1  
**RC:** None  
**NANO:** No  
**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:** 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.

### BARIUM SULFATE

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2020-09-09

**%:** 0.0000 - 2.0000  
**GS:** BM-2  
**RC:** None  
**NANO:** Unknown  
**SUBSTANCE ROLE:** Filler

<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<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:** Filler
### Naphtha

**ID:** 64742-95-6  
**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2020-09-09  
**%:** 0.0000 - 1.0000  
**GS:** LT-1  
**RC:** None  
**NANO:** Unknown  
**SUBSTANCE ROLE:** Filler

<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAMMALIAN</td>
<td>EU - GHS (H-Statements)</td>
<td>H304 - May be fatal if swallowed and enters airways</td>
</tr>
<tr>
<td>GENE MUTATION</td>
<td>EU - GHS (H-Statements)</td>
<td>H340 - May cause genetic defects</td>
</tr>
<tr>
<td>CANCER</td>
<td>EU - GHS (H-Statements)</td>
<td>H350 - May cause cancer</td>
</tr>
<tr>
<td>CANCER</td>
<td>EU - REACH Annex XVII CMRs</td>
<td>Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man</td>
</tr>
<tr>
<td>GENE MUTATION</td>
<td>EU - REACH Annex XVII CMRs</td>
<td>Mutagen Category 2 - Substances which should be regarded as if they are Mutagenic to man</td>
</tr>
<tr>
<td>MULTIPLE</td>
<td>ChemSec - SIN List</td>
<td>CMR - Carcinogen, Mutagen &amp;/or Reproductive Toxicant</td>
</tr>
<tr>
<td>ENDOCRINE</td>
<td>TEDX - Potential Endocrine Disruptors</td>
<td>Potential Endocrine Disruptor</td>
</tr>
<tr>
<td>MULTIPLE</td>
<td>German FEA - Substances Hazardous to Waters</td>
<td>Class 3 - Severe Hazard to Waters</td>
</tr>
<tr>
<td>CANCER</td>
<td>EU - Annex VI CMRs</td>
<td>Carcinogen Category 1B - Presumed Carcinogen based on animal evidence</td>
</tr>
<tr>
<td>GENE MUTATION</td>
<td>EU - Annex VI CMRs</td>
<td>Mutagen - Category 1B</td>
</tr>
<tr>
<td>GENE MUTATION</td>
<td>GHS - Australia</td>
<td>H340 - May cause genetic defects</td>
</tr>
<tr>
<td>CANCER</td>
<td>GHS - Australia</td>
<td>H350 - May cause cancer</td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** Filler

### Aluminum Oxide

**ID:** 1344-28-1  
**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2020-09-09  
**%:** 0.0000 - 1.0000  
**GS:** BM-2  
**RC:** None  
**NANO:** No  
**SUBSTANCE ROLE:** Pigment

<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESPIRATORY</td>
<td>AOEC - Asthmagens</td>
<td>Asthmagen (Rs) - sensitizer-induced</td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** Filler

### Silica

**ID:** 7631-86-9  
**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2020-09-09  
**%:** 0.0000 - 1.0000  
**GS:** BM-1  
**RC:** None  
**NANO:** No  
**SUBSTANCE ROLE:** Pigment
### CANCER

<table>
<thead>
<tr>
<th>Agency and List Titles</th>
<th>HAZARD TYPE</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHS - Japan</td>
<td>CANCER</td>
<td>Carcinogenicity - Category 1A [H350]</td>
</tr>
<tr>
<td>GHS - Australia</td>
<td>CANCER</td>
<td>H350i - May cause cancer by inhalation</td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** Pigment

### BUTANOL

**ID:** 71-36-3

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2020-09-09

<table>
<thead>
<tr>
<th>%:</th>
<th>0.0000 - 1.0000</th>
<th>GS: BM-2</th>
<th>RC: None</th>
<th>NANO: Unknown</th>
<th>SUBSTANCE ROLE: Solvent</th>
</tr>
</thead>
</table>

**HAZARD TYPE**  
**AGENCY AND LIST TITLES**  
**WARNINGS**

**Skin Irritation**  
**EU - GHS (H-Statements)**  
**H315 - Causes skin irritation**

**Eye Irritation**  
**EU - GHS (H-Statements)**  
**H318 - Causes serious eye damage**

**SUBSTANCE NOTES:** Solvent

### ETRIOL

**ID:** 77-99-6

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2020-09-09

<table>
<thead>
<tr>
<th>%:</th>
<th>0.0000 - 0.1000</th>
<th>GS: LT-UNK</th>
<th>RC: None</th>
<th>NANO: Unknown</th>
<th>SUBSTANCE ROLE: Pigment</th>
</tr>
</thead>
</table>

**HAZARD TYPE**  
**AGENCY AND LIST TITLES**  
**WARNINGS**

**None found**

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

**SUBSTANCE NOTES:** Pigment
### 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

<table>
<thead>
<tr>
<th>Certifying Party:</th>
<th>Self-declared</th>
<th>Issue Date:</th>
<th>2020-09-09</th>
<th>Expiry Date:</th>
<th>2023-09-09</th>
<th>Certifier or Lab:</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate and Compliance Notes:</td>
<td>This product in inherently non emitting.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

#### LCA - Environmental Product Declaration (EPD) by UL

<table>
<thead>
<tr>
<th>Certifying Party:</th>
<th>Third Party</th>
<th>Issue Date:</th>
<th>2016-10-06</th>
<th>Expiry Date:</th>
<th>2021-10-06</th>
<th>Certifier or Lab:</th>
<th>UL Environment</th>
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<tbody>
<tr>
<td>Certificate and Compliance Notes:</td>
<td>Product Specific EPD</td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

#### Other - ILFI Declare - Red List Free

<table>
<thead>
<tr>
<th>Certifying Party:</th>
<th>Second Party</th>
<th>Issue Date:</th>
<th>2020-05-01</th>
<th>Expiry Date:</th>
<th>2021-05-01</th>
<th>Certifier or Lab:</th>
<th>ILFI</th>
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<tbody>
<tr>
<td>Certificate and Compliance Notes:</td>
<td>ILFI Red List Free</td>
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<td></td>
<td></td>
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</tr>
</tbody>
</table>

### 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

For more information on this product visit: https://www.armstrongceilings.com/commercial/en-us/suspension-systems.html
MANUFACTURER INFORMATION

MANUFACTURER: Armstrong World Industries
ADDRESS: 2500 Columbia Avenue
Lancaster PA 17603, United States
WEBSITE: www.armstrongceilings.com

CONTACT NAME: Anita Snader
TITLE: Sustainability Manager
PHONE: 1-877-276-7876
EMAIL: techline@armstrongceilings.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 (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 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.