E Screen Chroma™
by Mermet Corporation

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

HPD UNIQUE IDENTIFIER: 21700
CLASSIFICATION: 12 24 13 Roller Window Shades

PRODUCT DESCRIPTION: E Screen Chroma™ is a high performance solar shade fabric with a reflective and durable aluminum backing. The fabric can reflect up to 82% of solar radiation for optimal thermal performance. E Screen Chroma is available in five designer colors and has a classic, basketweave construction for clear viewthrough and exceptional dimensional stability.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

<table>
<thead>
<tr>
<th>Inventory Reporting Format</th>
<th>Threshold Disclosed Per</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nested Materials Method</td>
<td>Material</td>
</tr>
<tr>
<td>Basic Method</td>
<td>Product</td>
</tr>
</tbody>
</table>

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

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.

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>SUBSTANCE</th>
<th>RESIDUAL OR IMPURITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>E SCREEN CHROMA™</td>
<td>POLYVINYL CHLORIDE (PVC)</td>
<td>RES FIBER GLASS, BIOSOLUBLE AND/OR WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT ≤18 % BY WEIGHT</td>
</tr>
<tr>
<td></td>
<td>LT-P1</td>
<td>RES FIBER GLASS, BIOSOLUBLE AND/OR WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT ≤18 % BY WEIGHT</td>
</tr>
<tr>
<td></td>
<td>DIPROPYLHEPTYL PHTHALATE (DPHP)</td>
<td>BM-U</td>
</tr>
<tr>
<td></td>
<td>ANTIMONY TRIOXIDE</td>
<td>BM-1</td>
</tr>
<tr>
<td></td>
<td>MUL BARIUM ZINC COMPLEX</td>
<td>NoGS</td>
</tr>
<tr>
<td></td>
<td>ZINC SULFIDE LT-UNK</td>
<td>DIPROPYLHEPTYL PHTHALATE (DPHP) BM-U</td>
</tr>
<tr>
<td></td>
<td>ACRYLATE LT-UNK</td>
<td>ACRYLATE LT-UNK</td>
</tr>
<tr>
<td></td>
<td>POLYDIMETHYL SILOXANE LT-P1</td>
<td>POLYDIMETHYL SILOXANE LT-P1</td>
</tr>
<tr>
<td></td>
<td>PBT ALUMINUM NoGS</td>
<td>PBT ALUMINUM NoGS</td>
</tr>
</tbody>
</table>

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
Other: ROHS 2-2011/65/EU Restriction of Hazardous Substances Directive

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients Option 1

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared
VERIFIER: Self-Prepared
VERIFICATION #: Self-Prepared
SCREENING DATE: 2019-04-16
PUBLISHED DATE: 2020-09-11
EXPIRY DATE: 2022-04-16
**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](http://www.hpd-collaborative.org/hpd-2-2-standard)

### E Screen Chroma™

**PRODUCT THRESHOLD:** 100 ppm  
**RESIDUALS AND IMPURITIES CONSIDERED:** No

**RESIDUALS AND IMPURITIES NOTES:** No evidence of residuals and impurities was identified by any supplier or found in our manufacturing process at a level greater than 100ppm. Therefore residuals and impurities were not considered.

**OTHER PRODUCT NOTES:** This HPD covers all colors of E Screen Chroma™ which leads to some variation in composition. No alternate supplier or materials are applicable for this product.

### POLYVINYL CHLORIDE (PVC)

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2019-04-16

<table>
<thead>
<tr>
<th>%</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>SUBSTANCE ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.0000 - 44.0000</td>
<td>LT-P1</td>
<td>None</td>
<td>No</td>
<td>Polymer species</td>
</tr>
</tbody>
</table>

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

**RESPIRATORY**  
**AOEC - Asthmagens**  
**Asthmagen (Rs) - sensitizer-induced**

**SUBSTANCE NOTES:** Polymer Coating

### FIBER GLASS, BIOSOLUBLE AND/OR WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT ≤18 % BY WEIGHT

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2019-04-16

<table>
<thead>
<tr>
<th>%</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>SUBSTANCE ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>33.0000 - 37.0000</td>
<td>LT-UNK</td>
<td>None</td>
<td>No</td>
<td>Textile component</td>
</tr>
</tbody>
</table>

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

None found

**SUBSTANCE NOTES:** Fiberglass core yarn to guarantee the mechanical properties of the coated yarn.

### DIPROPYLHEPTYL PHTHALATE (DPHP)

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2019-04-16

<table>
<thead>
<tr>
<th>%</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>SUBSTANCE ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.0000 - 19.0000</td>
<td>BM-U</td>
<td>None</td>
<td>No</td>
<td>Plasticizer</td>
</tr>
</tbody>
</table>

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

None found

**SUBSTANCE NOTES:** DPHP is a plasticizer used in the formulation of E Screen Chroma™.
### Antimony Trioxide

**ID:** 1309-64-4

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

**HAZARD SCREENING DATE:** 2019-04-16

#### Cancer

<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 3B - Evidence of carcinogenic effects but not sufficient for classification</td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** Plasticizer mixture

#### Antimony Trioxide

**ID:** 1309-64-4

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

**HAZARD SCREENING DATE:** 2019-04-16

| %: 2.0000 - 2.5000 | GS: BM-1 | RC: None | NANO: No | SUBSTANCE ROLE: Flame retardant |

**HAZARD TYPE**

<table>
<thead>
<tr>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC</td>
<td>Group 2b - Possibly carcinogenic to humans</td>
</tr>
<tr>
<td>CA EPA - Prop 65</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>US NIH - Report on Carcinogens</td>
<td>Reasonably Anticipated to be Human Carcinogen</td>
</tr>
<tr>
<td>EU - GHS (H-Statements)</td>
<td>H351 - Suspected of causing cancer</td>
</tr>
<tr>
<td>ChemSec - SIN List</td>
<td>CMR - Carcinogen, Mutagen &amp;/or Reproductive Toxicant</td>
</tr>
<tr>
<td>MAK</td>
<td>Carcinogen Group 2 - Considered to be carcinogenic for man</td>
</tr>
<tr>
<td>GHS - Japan</td>
<td>Carcinogenicity - Category 1B [H350]</td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** Proprietary flame retardant system to improve the FR characteristics of the yarn. The Antimony Trioxide is bonded with the coating. Any associated health risks are based on contact with the powder form during manufacture of the raw ingredient.

### Barium Zinc Complex

**ID:** Not registered

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

**HAZARD SCREENING DATE:** 2019-04-16

| %: 1.9000 - 2.3000 | GS: NoGS | RC: None | NANO: No | SUBSTANCE ROLE: Heat or UV stabilizer |

<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:** Barium Zinc Complex used as a thermal stabilizer for the PVC resin. Heat stabilizer is not disclosed due to the proprietary composition from supplier. Only SDS level disclosure is available.

### Zinc Sulfide

**ID:** 1314-98-3

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

**HAZARD SCREENING DATE:** 2019-04-16

| %: 1.0000 - 3.0000 | GS: LT-UNK | 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>None found</td>
<td></td>
<td>No warnings found on HPD Priority Hazard Lists</td>
</tr>
</tbody>
</table>

**SUBSTANCE ROLE:** Pigment
**HAZARD TYPE**

<table>
<thead>
<tr>
<th>None found</th>
<th>WARNINGS</th>
<th>None found</th>
</tr>
</thead>
<tbody>
<tr>
<td>No warnings found on HPD Priority Hazard Lists</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** Due to the large range of colors provided by Mermet, only white pigment is included in this HPD.

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**ACRYLATE**

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE: 2019-04-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 0.8000 - 1.2000 Gs: NoGS RC: None NANO: No SUBSTANCE ROLE: Coating</td>
<td></td>
</tr>
</tbody>
</table>

**HAZARD TYPE**

<table>
<thead>
<tr>
<th>None found</th>
<th>WARNINGS</th>
<th>None found</th>
</tr>
</thead>
<tbody>
<tr>
<td>No warnings found on HPD Priority Hazard Lists</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** The coating blend is not disclosed due to the proprietary composition from supplier. Only SDS level disclosure is available.

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**POLYDIMETHYL SILOXANE**

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE: 2019-04-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 0.2000 - 0.6000 Gs: LT-P1 RC: None NANO: No SUBSTANCE ROLE: Lubricant</td>
<td></td>
</tr>
</tbody>
</table>

**HAZARD TYPE**

<table>
<thead>
<tr>
<th>PBT</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC - CEPA DSL</td>
<td>Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans</td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** In the final product, this lubricant is bonded with the coating. Associated health risks are derived from contact and handling of the raw ingredient.

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**ALUMINUM**

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE: 2019-04-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 0.0100 Gs: NoGS RC: None NANO: No SUBSTANCE ROLE: Reflectance</td>
<td></td>
</tr>
</tbody>
</table>

**HAZARD TYPE**

<table>
<thead>
<tr>
<th>None found</th>
<th>WARNINGS</th>
<th>None found</th>
</tr>
</thead>
<tbody>
<tr>
<td>No warnings found on HPD Priority Hazard Lists</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** Ultra fine layer of aluminum, vacuum bonded to one side of the fabric. The product contains <0.0001% aluminum in its composition.
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>UL/GreenGuard Gold Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third Party</td>
<td><img src="https://spot.ul.com/main-app/products/detail/5ad1ebc855b0e82d946a6edf?page_type=Products%20Catalog" alt="Image" /></td>
</tr>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>All Facilities</td>
</tr>
<tr>
<td>ISSUE DATE:</td>
<td>2015-06-30</td>
</tr>
<tr>
<td>EXPIRY DATE:</td>
<td>2021-05-16</td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>GreenGuard Environmental Institute</td>
</tr>
</tbody>
</table>

**CERTIFICATION AND COMPLIANCE NOTES:**

**OTHER**

<table>
<thead>
<tr>
<th>CERTIFYING PARTY:</th>
<th>ROHS 2-2011/65/EU Restriction of Hazardous Substances Directive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third Party</td>
<td><img src="https://spot.ul.com/main-app/products/detail/5ad1ebc855b0e82d946a6edf?page_type=Products%20Catalog" alt="Image" /></td>
</tr>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>All Facilities</td>
</tr>
<tr>
<td>ISSUE DATE:</td>
<td>2019-03-12</td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>St. Louis Testing Laboratories</td>
</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**

This HPD covers all colors of E Screen Chroma™ fabric. Health hazards and screenings completed by the HPDC Online Builder tool.
MANUFACTURER INFORMATION

MANUFACTURER: Mermet Corporation
ADDRESS: 5970 N Main Street
Cowpens South Carolina 29330, United States
WEBSITE: www.MermetUSA.com

CONTACT NAME: Nathan Winternute
TITLE: Product & Testing Engineer
PHONE: 8644635439
EMAIL: nathan.wintermute@MermetUSA.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.