BIO-XOREL
by carnegie fabrics

CLASSIFICATION: 097200

PRODUCT DESCRIPTION: High performing material (Wallcovering, panel, upholstery) sourced from rapidly renewable sugarcane plant, instead of fossil fuels. Patterns: Abacus, Antoinette, Artisan, Axis, Braid, Bridgette, Bridgette, Coco, Coulette, Dash, Deco, Flashback, Fragment, Hoop, Luxe, Moire Stripe, Nexus, Pipeline, Spire, Strie, Tangle, Topiary, Twine, Veneer, Zipper.

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

Residuals/Impurities
- Considered
- Partially Considered
- Not Considered

Are All Substances Above the Threshold Indicated:
- Yes
- No

Characterized
- Yes
- No

Percent Weight and Role Provided?
- Yes
- No

Screened
- Yes
- No

Using Priority Hazard Lists with Results Disclosed?
- Yes
- No

Identified
- Yes
- No

Name and Identifier Provided?
- Yes
- No

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>
<th>GREENSCREEN SCORE</th>
<th>HAZARD TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLYETHYLENE (BIO-BASED)</td>
<td>POLYETHYLENE</td>
<td>LT-UNK</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of Greenscreen BM-4/BM3 contents........... 0
Contents highest concern GreenScreen Benchmark or List translator Score............. LT-UNK Nanomaterial............. No

INVENTORY AND SCREENING NOTES:
The product has been screened and reviewed by 3rd party certification services.

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: SCS INDOOR ADVANTAGE GOLD
Multi-attribute: CRADLE TO CRADLE gold
Material content migration: MATERIAL HEALTH DECLARARATION PLATINUM
Multi-attribute: FACT CERTIFICATION

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed

Third Party Verified?
- Yes
- No

PREPARER: Self-Prepared
VERIFIER: 
VERIFICATION #:

SCREENING DATE: 2017-08-02
PUBLISHED DATE: 2017-08-02
EXPIRY DATE: 2020-08-02
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 2.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-standard

### POLYETHYLENE (BIO-BASED)

**PRODUCT THRESHOLD:** 100 ppm  
**RESIDUALS AND IMPURITIES CONSIDERED:** Yes

**RESIDUALS AND IMPURITIES NOTES:** This product was thoroughly tested for hazardous substances and had its chemical inventory reviewed by 3rd party certification services and no known impurities were found in this product.

**OTHER PRODUCT NOTES:** Bio portion of the final yarns

### POLYETHYLENE

<table>
<thead>
<tr>
<th>%</th>
<th>100.0000 - 100.0000</th>
<th>GB</th>
<th>LT-UNK</th>
<th>RC</th>
<th>None</th>
<th>NANO</th>
<th>No</th>
<th>ROLE</th>
<th>Main component</th>
</tr>
</thead>
</table>

**HAZARDS:** None Found  
**AGENCY(IES) WITH WARNINGS:** No warnings found on HPD Priority lists

**SUBSTANCE NOTES:** This product's chemical inventory has been reviewed by 3rd party certification services and tested for hazardous substances by independent testing labs, and no known impurities were found in this product.

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>Third Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLICABLE FACILITIES</td>
<td>ALL FACILITIES</td>
</tr>
</tbody>
</table>

**CERTIFICATION AND COMPLIANCE NOTES:** Since 1981 the solution for sustainable, performance oriented interiors has been Xorel Fabrics. Unlike vinyls, Xorel is woven from polyethylene and is chlorine and plasticizer free. It is extremely safe in its manufacture, use and disposal. Xorel Fabrics are incredibly durable, easily cleaned, flame retardant and present none of the environmental problems attributed to vinyl by its critics. In fact, Xorel Fabrics are recognized by Greenpeace as a viable alternative to vinyl.

### SCS INDOOR ADVANTAGE GOLD

<table>
<thead>
<tr>
<th>ISSUE DATE</th>
<th>EXPIRY DATE</th>
<th>CERTIFIER OR LAB</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-05-01</td>
<td>2017-04-30</td>
<td>Berkeley Analytical</td>
</tr>
</tbody>
</table>

**CERTIFICATION AND COMPLIANCE NOTES:** Since 1981 the solution for sustainable, performance oriented interiors has been Xorel Fabrics. Unlike vinyls, Xorel is woven from polyethylene and is chlorine and plasticizer free. It is extremely safe in its manufacture, use and disposal. Xorel Fabrics are incredibly durable, easily cleaned, flame retardant and present none of the environmental problems attributed to vinyl by its critics. In fact, Xorel Fabrics are recognized by Greenpeace as a viable alternative to vinyl.

**MULTI-ATTRIBUTE**

**CRADLE TO CRADLE gold**
Xorel Fabrics are designed for use as wallcovering, upholstery, and panel fabric for interior finishes. This product is woven from polyethylene yarns, and designed to be durable, easy to clean, and colorfast without the use of finishes or coatings. Xorel is offered in dozens of patterns in hundreds of standard colorways. The bio-based version, Xorel® Bio, is made of polyethylene yarn derived from plant-based resources.

**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.

**Section 5: General Notes**

Bio-Xorel is a Polyethylene material with no known residuals or impurities.

**Section 6: References**

MANUFACTURER INFORMATION
**MANUFACTURER:** carnegie fabrics  
**ADDRESS:** 110 north center avenue  
**WEBSITE:** WWW.CARNEGIEFABRICS.COM  

**CONTACT NAME:** CHARLES GRIFFIN  
**TITLE:** DIRECTOR of TECHNICAL SERVICES.  
**PHONE:** 5163073756  
**EMAIL:** CGRIFFIN@CARNEGIEFABRICS.COM

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**KEY**

<table>
<thead>
<tr>
<th>OSHA MSDS</th>
<th>Occupational Safety and Health Administration Material Safety Data Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHS SDS</td>
<td>Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet</td>
</tr>
</tbody>
</table>

**Hazard Types**

- AQU Aquatic toxicity
- CAN Cancer
- DEV Developmental toxicity
- END Endocrine activity
- EYE Eye irritation/corrosivity
- GEN Gene mutation
- GLO Global warming
- MAM Mammalian/systemic/organ toxicity
- MUL Multiple hazards
- NEU Neurotoxicity
- OZO Ozone depletion
- PBT Persistent Bioaccumulative Toxic
- PHY Physical Hazard (reactive)
- REP Reproductive toxicity
- RES Respiratory sensitization
- SKI Skin sensitization/irritation/corrosivity
- LAN Land Toxicity
- NF Not found on Priority Hazard Lists

**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 (insufficient data to benchmark)
- LT-P1 List Translator Possible Benchmark 1
- LT-1 List Translator Likely Benchmark 1
- LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
- NoGS Unknown (no data on List Translator Lists)

**Recycled Types**

- PreC Preconsumer (Post-Industrial)
- PostC Postconsumer
- Both Both Preconsumer and Postconsumer
- Unk Inclusion of recycled content is unknown
- None Does not include recycled content

**Other Terms**

**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

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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

www.hpd-collaborative.org  
HPD v2.1 created via HPDC Builder Page 4 of 5
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.