Tempe Fabric by Texstyle by Rollease Acmeda

HPD UNIQUE IDENTIFIER: 21101
CLASSIFICATION: 12 Furnishings
PRODUCT DESCRIPTION: Tempe blackout fabric is ideal for your light blocking and total privacy needs. Made from flame retardant 100% polyester with an acrylic coating, Tempe is PVC-free, offering an economical and environmentally friendly choice that will add beauty to a room while reducing glare. Tempe is offered in a neutral and appealing palette of nine colors and is ideal for both commercial and residential applications. Tempe features an off-white backing to create a uniform appearance from the exterior.

Section 1: Summary

Nested 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
- Residuals/Impurities
  Considered in 7 of 7 Materials
  Explanation(s) provided for Residuals/Impurities?
  - Yes
  - No

All Substances Above the Threshold Indicated Are:
- Characterized
  - Yes Ex/SC
  - Yes
  - No

Screened
- Yes Ex/SC
- Yes
- No

Identified
- Yes Ex/SC
- Yes
- No

INVENTORY AND SCREENING NOTES:
Residuals and impurities were screened using the toxnet database. This database is a general database and lists possible residuals and impurities for chemicals and substances as reported in peer-reviewed studies or other credible documentation. Just because a chemical could have the impurity listed in the database does not mean that this material contains that impurity. Actual impurities are a product of the sourced product and its suppliers. Residuals and impurities listed in the HPD are for information purposes only and are not 100% guaranteed to be present in the fabric.

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
PET | POLYETHYLENE TEREPTHALATE | LT-UNK | ANTIMONY TRIOXIDE | BM-1 | CAN | MANGANESE OXIDE | LT-PT | REP | NITROGEN | NOGS | ZINC | OXIDE | BM-1 | RES | AOU | END | MUL | POLYACRYLIC ACID | LT-UNK | CAN | UNDISCLOSED | UNDISCLOSED | LT-1 | PBT | END | UNDISCLOSED | UNDISCLOSED | LT-1 | CAN | END | YELLOW | C.I. PIGMENT YELLOW 42 | LT-UNK | CARBON BLACK | CARBON BLACK | LT-1 | CAN | POLYCYCLIC AROMATIC HYDROCARBONS | LT-1 | PBT | CAN | IRON OXIDE | IRON OXIDE | LT-UNK |

Number of Greenscreen BM-4/BM3 contents ... 0
Contents highest concern GreenScreen Benchmark or List translator Score ... BM-1
Nanomaterial ... No

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: CDPH Standard Method V1.2 (Section 01350/CHPS) - Classroom & Office scenario

CONSISTENCY WITH OTHER PROGRAMS
Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?
- Yes
- No

PREPARER: Self-Prepared

VERIFICATION #:
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

<table>
<thead>
<tr>
<th>PET</th>
<th>%: 40.0000 - 50.0000</th>
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</thead>
<tbody>
<tr>
<td>PRODUCT THRESHOLD:</td>
<td>100 ppm</td>
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<tr>
<td>RESIDUALS AND IMPURITIES CONSIDERED:</td>
<td>Yes</td>
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<tr>
<td>MATERIAL TYPE:</td>
<td>Polymeric Material</td>
</tr>
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</table>

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were screened using the toxnet database. Residuals and impurities listed in the HPD are for information purposes only and are not 100% guaranteed to be present in the fabric. For additional information please check the section INVENTORY AND SCREENING NOTES.

OTHER MATERIAL NOTES: Pharos database lists the following as known or request residuals:

- **Impurity 1: Antimony trioxide**
  "The prepolymer can also be formed by transesterification (B) of dimethyl terephthalate with ethylene glycol, forming methanol as a by-product (Scheirs and Long, 2003). Oxides of e.g. zinc or manganese are commonly added to catalyze the first reaction, and antimony (III) oxide is most commonly used to catalyze the second step reaction (Ravve, 2000; Stevens, 1999)." (Lithner 2011)

- **Impurity 2- Manganese oxide**
  "Oxides of e.g. zinc or manganese are commonly added to catalyze the first reaction, and antimony (III) oxide is most commonly used to catalyze the second step reaction (Ravve, 2000; Stevens, 1999)." (Lithner 2011)

- **Impurity 3- Nitrogen**
  In the DMT process, "Vapor from the top of the methanol column is sent to a cold water (or refrigerated) condenser, where the condensate returns to the methanol column, and noncondensables are purged with nitrogen before being emitted to the atmosphere." http://www.epa.gov/ttn/chief/ap42/ch06/final/c06s06-2.pdf

- **Impurity 4- Zinc oxide**
  "The prepolymer can also be formed by transesterification (B) of dimethyl terephthalate with ethylene glycol, forming methanol as a by-product (Scheirs and Long, 2003). Oxides of e.g. zinc or manganese are commonly added to catalyze the first reaction, and antimony (III) oxide is most commonly used to catalyze the second step reaction (Ravve, 2000; Stevens, 1999)." (Lithner 2011)

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**POLYETHYLENE TEREPHTHALATE**

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD:</th>
<th>Pharos Chemical and Materials Library</th>
</tr>
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<tbody>
<tr>
<td>HAZARD SCREENING DATE:</td>
<td>2019-04-06</td>
</tr>
<tr>
<td>%: 40.0000 - 50.0000</td>
<td>GS: LT-UNK</td>
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<tr>
<td>RC: None</td>
<td>NANO: No</td>
</tr>
<tr>
<td>SUBSTANCE ROLE: Polymer species</td>
<td></td>
</tr>
</tbody>
</table>

No warnings found on HPD Priority Hazard Lists
**SUBSTANCE NOTES:** Pharos database lists the following as known or request residuals:

**Impurity 1: Antimony trioxide:**

"The prepolymer can also be formed by transesterification (B) of dimethyl terephthalate with ethylene glycol, forming methanol as a by-product (Scheirs and Long, 2003). Oxides of e.g. zinc or manganese are commonly added to catalyze the first reaction, and antimony (III) oxide is most commonly used to catalyze the second step reaction (Ravve, 2000; Stevens, 1999)." (Lithner 2011)

"Residual molecular antimony (Sb) catalyst materials can migrate into food or water and be a potential contaminant from PET packaging materials. Sb was established as a catalyst of choice because it has some favorable properties, e.g. it gives bright, shiny polymers. There are two other main catalysts for PET: germanium oxide and titanium compounds (Thiele 2001)."

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3613973/

"Antimony trioxide is the preferred polycondensation catalyst for the production of PET.*" 

"The Sb concentration of commercialized PET resin ranges between 190 and 300 µg g-1." [Link](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-50532014000400009)

**Impurity 2- Manganese oxide:**

"Oxides of e.g. zinc or manganese are commonly added to catalyze the first reaction, and antimony (III) oxide is most commonly used to catalyze the second step reaction (Ravve, 2000; Stevens, 1999)." (Lithner 2011)

**Impurity 3- Nitrogen:**

In the DMT process, "Vapor from the top of the methanol column is sent to a cold water (or refrigerated) condenser, where the condensate returns to the methanol column, and noncondensables are purged with nitrogen before being emitted to the atmosphere." [Link](http://www.epa.gov/ttn/chief/ap42/ch06/final/c06s06-2.pdf)

**Impurity 4- Zinc oxide:**

"The prepolymer can also be formed by transesterification (B) of dimethyl terephthalate with ethylene glycol, forming methanol as a by-product (Scheirs and Long, 2003). Oxides of e.g. zinc or manganese are commonly added to catalyze the first reaction, and antimony (III) oxide is most commonly used to catalyze the second step reaction (Ravve, 2000; Stevens, 1999)." (Lithner 2011)

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### Antimony Trioxide

**ID:** 1309-64-4

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

**HAZARD SCREENING DATE:** 2019-04-08

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<th>GS:</th>
<th>BM-1</th>
<th>RC:</th>
<th>UNK</th>
<th>NANO:</th>
<th>No</th>
<th>SUBSTANCE ROLE:</th>
<th>Impurity/Residual</th>
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<td>HAZARD TYPE</td>
<td>AGENCY AND LIST TITLES</td>
<td>WARNINGS</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CANCER</td>
<td>IARC</td>
<td>Group 2b - Possibly carcinogenic to humans</td>
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<td></td>
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<tr>
<td>CANCER</td>
<td>CA EPA - Prop 65</td>
<td>Carcinogen</td>
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<tr>
<td>CANCER</td>
<td>US NIH - Report on Carcinogens</td>
<td>Reasonably Anticipated to be Human Carcinogen</td>
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<td></td>
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<tr>
<td>CANCER</td>
<td>EU - GHS (H-Statements)</td>
<td>H351 - Suspected of causing cancer</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>MULTIPLE</td>
<td>ChemSec - SIN List</td>
<td>CMR - Carcinogen, Mutagen &amp;/or Reproductive Toxicant</td>
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<td></td>
<td></td>
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<tr>
<td>CANCER</td>
<td>MAK</td>
<td>Carcinogen Group 2 - Considered to be carcinogenic for man</td>
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<tr>
<td>CANCER</td>
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<td></td>
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**SUBSTANCE NOTES:** "The prepolymer can also be formed by transesterification (B) of dimethyl terephthalate with ethylene glycol, forming methanol as a by-product (Scheirs and Long, 2003). Oxides of e.g. zinc or manganese are commonly added to catalyze the first reaction, and antimony (III) oxide is most commonly used to catalyze the second step reaction (Ravve, 2000; Stevens, 1999)." (Lithner 2011)

"Residual molecular antimony (Sb) catalyst materials can migrate into food or water and be a potential contaminant from PET packaging materials. Sb was established as a catalyst of choice because it has some favourable properties, e.g. it gives bright, shiny polymers. There are two other main catalysts for PET: germanium oxide and titanium compounds (Thiele 2001)."

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3613973/

"Antimony trioxide is the preferred polycondensation catalyst for the production of PET.*" "The Sb concentration of commercialized PET resin ranges between 190 and 300 µg g-1." [Link](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-50532014000400009)

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### Manganese Oxide

**ID:** 1317-34-6

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

**HAZARD SCREENING DATE:** 2019-04-08

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Tempe Fabric by Texstyle

hpdrepository.hpd-collaborative.org

HPD v2.2 created via HPDC Builder
### Nitrogen

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<th>HAZARD SCREENING METHOD</th>
<th>Pharos Chemical and Materials Library</th>
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<tr>
<td>HAZARD SCREENING DATE</td>
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<tr>
<td>%: Impurity/Residual</td>
<td></td>
</tr>
<tr>
<td>GS: NoGS</td>
<td></td>
</tr>
<tr>
<td>RC: UNK</td>
<td></td>
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<tr>
<td>NANO: No</td>
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</tr>
<tr>
<td>SUBSTANCE ROLE:</td>
<td>Impurity/Residual</td>
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</tbody>
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**WARNINGS**

None found

No warnings found on HPD Priority Hazard Lists

**SUBSTANCE NOTES:**

In the DMT process, "Vapor from the top of the methanol column is sent to a cold water (or refrigerated) condenser, where the condensate returns to the methanol column, and noncondensables are purged with nitrogen before being emitted to the atmosphere." [http://www.epa.gov/ttn/chief/ap42/ch06/final/c06s06-2.pdf](http://www.epa.gov/ttn/chief/ap42/ch06/final/c06s06-2.pdf)

### Zinc Oxide

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<td>HAZARD SCREENING DATE</td>
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</tr>
<tr>
<td>%: Impurity/Residual</td>
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<td>GS: BM-1</td>
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<tr>
<td>SUBSTANCE ROLE:</td>
<td>Impurity/Residual</td>
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</tbody>
</table>

**WARNINGS**

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

- **Acute Aquatic**
  - EU - GHS (H-Statements)
  - H400 - Very toxic to aquatic life

- **Chronic Aquatic**
  - EU - GHS (H-Statements)
  - H410 - Very toxic to aquatic life with long lasting effects

- **Endocrine**
  - TEDX - Potential Endocrine Disruptors
  - Potential Endocrine Disruptor

- **Multiple**
  - German FEA - Substances Hazardous to Waters
  - Class 2 - Hazard to Waters

**SUBSTANCE NOTES:**

"The prepolymer can also be formed by transesterification (B) of dimethyl terephthalate with ethylene glycol, forming methanol as a by-product (Scheirs and Long, 2003). Oxides of e.g. zinc or manganese are commonly added to catalyse the first reaction, and antimony (III) oxide is most commonly used to catalyse the second step reaction (Ravve, 2000; Stevens, 1999)." (Lithner 2011)

### Polyacrylic Acid

<table>
<thead>
<tr>
<th>PRODUCT THRESHOLD: 100 ppm</th>
<th>RESIDUALS AND IMPURITIES CONSIDERED: Yes</th>
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<tbody>
<tr>
<td>%: 20.0000 - 30.0000</td>
<td>MATERIAL TYPE: Polymeric Material</td>
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**OTHER MATERIAL NOTES:**

**POLYACRYLIC ACID**

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<tbody>
<tr>
<td>%:</td>
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<td>GS: LT-UNK</td>
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<td>SUBSTANCE ROLE:</td>
<td>Binder</td>
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<td>HAZARD TYPE:</td>
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<td>AGENCY AND LIST TITLES</td>
<td></td>
</tr>
<tr>
<td>CANCER</td>
<td>MAK</td>
<td>WARNINGS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels</td>
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</table>

**SUBSTANCE NOTES:** No known residuals or impurities.

**UNDISCLOSED**

<table>
<thead>
<tr>
<th>PRODUCT THRESHOLD:</th>
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<tr>
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<td>MATERIAL TYPE:</td>
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<tbody>
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<td>HAZARD TYPE:</td>
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<tr>
<td>PBT</td>
<td>OSPAR - Priority PBTs &amp; EDs &amp; equivalent concern</td>
<td>PBT - Chemical for Priority Action</td>
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</tr>
<tr>
<td>ENDOCRINE</td>
<td>OSPAR - Priority PBTs &amp; EDs &amp; equivalent concern</td>
<td>Endocrine Disruptor - Chemical for Priority Action</td>
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<tr>
<td>PBT</td>
<td>EHP - San Antonio Statement on BFRs &amp; CFRs</td>
<td>Flame retardant substance class of concern for PB&amp;T &amp; long range transport</td>
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</table>

**SUBSTANCE NOTES:** No known residuals or impurities.

**UNDISCLOSED**

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<td>MATERIAL TYPE:</td>
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**UNDISCLOSED**

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<th>HAZARD SCREENING DATE: 2019-04-08</th>
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<tr>
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<td>RC: None</td>
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</tr>
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<td>SUBSTANCE ROLE: Heat or UV stabilizer</td>
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<table>
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<tr>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
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</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:** Impurities are largely removed in further purification stages

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**YELLOW**

<table>
<thead>
<tr>
<th>PRODUCT THRESHOLD: 100 ppm</th>
<th>RESIDUALS AND IMPURITIES CONSIDERED: Yes</th>
<th>MATERIAL TYPE: Polymeric Material</th>
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**RESIDUALS AND IMPURITIES NOTES:** Residuals and impurities were screened using the toxnet database. Residuals and impurities listed in the HPD are for information purposes only and are not 100% guaranteed to be present in the fabric. For additional information please check the section INVENTORY AND SCREENING NOTES.

**OTHER MATERIAL NOTES:**

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**C.I. PIGMENT YELLOW 42**

<table>
<thead>
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<th>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</th>
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<td>RC: None</td>
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<td>NANO: No</td>
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<td>SUBSTANCE ROLE: Pigment</td>
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<table>
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<tr>
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<tbody>
<tr>
<td>None found</td>
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<td>No warnings found on HPD Priority Hazard Lists</td>
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</table>

**SUBSTANCE NOTES:** No known residuals or impurities.
CARBON BLACK

PRODUCT THRESHOLD: 100 ppm
RESIDUALS AND IMPURITIES CONSIDERED: Yes
MATERIAL TYPE: Other, Fossil fuels

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were screened using the toxnet database. Residuals and impurities listed in the HPD are for information purposes only and are not 100% guaranteed to be present in the fabric. For additional information please check the section INVENTORY AND SCREENING NOTES. The production process, particularly aromatic compounds. It lists PAHs, including specifically naphthalene as being present from carbon black. https://pharosproject.net/uploads/files/sources/3633/0efd85203c1996e46fe2cd0bf42ce5ddbf133a3.pdf, see p. 51

Less than 1% of the finished product consists of solvent-extractable organic material, i.e. polycyclic aromatic hydrocarbons (PAHs) and small amounts of other polynuclear aromatic hydrocarbons (PNAs) and elemental sulfur. Examples of PAHs extracted most frequently from carbon black using a variety of extraction methods (e.g. prolonged Soxhlet extraction with benzene or toluene) include benzopyrenes, benzo[ghi]perylen, coronene, fluoranthene, anthanthrene, and pyrene. These are present at levels that vary from less than 0.01 to 800 ppm, however seldom in excess of 200 ppm. Aacenaphthylene, chrysene, benzo[b]fluoranthene, benzo[a]anthracene, and pyrene may be present in lesser amounts (DFG, 1999; IARC, 1996; McCunney et al., 2001). [OECD] Organisation for Economic Co-operation and Development. 2006. Carbon black, CAS 1333-86-4; SIDS initial assessment report for carbon black; CAS No. 1333-86-4. SIDS initial assessment meeting 21, Washington (DC), 18–21 October 2005 (includes SIDS Initial Assessment Profile, SIDS Initial Assessment Report, and IUCLID Data Set) download link (Pharos mirror) Residual quantity can range between 0.000001% and 0.08%

OTHER MATERIAL NOTES: The original incrimination of carbon black as a carcinogenic agent is due to presence of impurities. ... /In European carbon black/ up to 1% by weight of 3,4-benzpyrene has been found, while ... /American carbon black/ is practically free of this substance. The carbon black in this product originates in China therefore no assumptions can be made about this substance.
POLYCYCLIC AROMATIC HYDROCARBONS

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library
HAZARD SCREENING DATE: 2019-04-08

%: Impurity/Residual
GS: LT-1
RC: UNK
NANO: Unknown
SUBSTANCE ROLE: Impurity/Residual

HAZARD TYPE
AGENT AND LIST TITLES
WARNINGS
PBT
WA DoE - PBT
PBT
CANCER
US NIH - Report on Carcinogens
Reasonably Anticipated to be Human Carcinogen
PBT
US EPA - Toxics Release Inventory PBTs
PBT
PBT
OSPAR - Priority PBTs & EDs & equivalent concern
PBT - Chemical for Priority Action
CANCER
MAK
Carcinogen Group 1 - Substances that cause cancer in man

SUBSTANCE NOTES:
The production process, particularly aromatic compounds.* It lists PAHs, including specifically naphthalene as being present in extracts from carbon black. https://pharosproject.net/uploads/files/sources/3633/0efd85203c1996e46fe2cd0bf42ce5ddbf133a3.pdf, see p. 51

Less than 1% of the finished product consists of solvent-extractable organic material, i.e. polycyclic aromatic hydrocarbons (PAHs) and small amounts of other polynuclear aromatic hydrocarbons (PNAs) and elemental sulfur. Examples of PAHs extracted most frequently from carbon black using a variety of extraction methods (e.g. prolonged Soxhlet extraction with benzene or toluene) include benzo[a]pyrene, benzo[ghi]perylene, coronene, fluoranthene, anthanthrene, and pyrene. These are present at levels that vary from less than 0.01 to 800 ppm, however seldom in excess of 200 ppm. Acenaphthylene, chrysene, benzo[b]fluoranthene, benzo[a]anthracene, and perylene may be present in lesser amounts (DFG, 1999; IARC, 1996; McCunney et al., 2001). [OECD] Organisation for Economic Co-operation and Development. 2006. Carbon black, CAS 1333-86-4; SIDS initial assessment report for carbon black; CAS No. 1333-86-4. SIDS initial assessment meeting 21, Washington (DC), 18–21 October 2005 (includes SIDS Initial Assessment Profile, SIDS Initial Assessment Report, and IUCLID Data Set) download link (Pharos mirror)
Residual quantity can range between 0.000001% and 0.08%

IRON OXIDE

%: 0.1000 - 1.0000

PRODUCT THRESHOLD: 100 ppm
RESIDUALS AND IMPURITIES CONSIDERED: Yes
MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES:
Residuals and impurities were screened using the toxnet database. Residuals and impurities listed in the HPD are for information purposes only and are not 100% guaranteed to be present in the fabric. For additional information please check the section INVENTORY AND SCREENING NOTES.

OTHER MATERIAL NOTES:
**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library

**HAZARD SCREENING DATE:** 2019-04-08

<table>
<thead>
<tr>
<th>%: 0.1000 - 1.0000</th>
<th>GS: LT-UNK</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>SUBSTANCE ROLE: Pigment</th>
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</thead>
</table>

**HAZARD TYPE**

<table>
<thead>
<tr>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>None found</td>
<td></td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** No known residuals or impurities.
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>
</tr>
</thead>
<tbody>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>All facilities are included.</td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>Berkeley Analytical</td>
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</tbody>
</table>

CDPH Standard Method V1.2 (Section 01350/CHPS) - Classroom & Office scenario

**CERTIFICATE URL:**

**ISSUE DATE:** 2019-04-08

**EXPIRY DATE:**

**CERTIFICATION AND COMPLIANCE NOTES:** This fabric was tested according to CDPH v1.2. TVOCs at 14 days were recorded as less than .5mg/m³. This is considered a low emitting product. For more information visit the website for Rollease Acmeda.

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.

**CONTRACT SERIES TWO SHADING SYSTEM**

**HPD URL:** [https://hpdrepository.hpd-collaborative.org/repository/HPDs/430_Rollease_Acmeda_Contract_Series_Two_Shading_System.pdf](https://hpdrepository.hpd-collaborative.org/repository/HPDs/430_Rollease_Acmeda_Contract_Series_Two_Shading_System.pdf)

**CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:**

This is the system for use with this fabric.

Section 5: General Notes

This HPD was conducted to 100 ppm with all impurities and residuals considered. This HPD is reporting substances to 100 ppm for this product Tempe. Residuals and impurities were screened using the toxnet and Pharos databases. This database is a general database and lists possible residuals and impurities for chemicals and substances as reported in peer-reviewed studies or other credible documentation. Just because a chemical could have the impurity listed in the database does not mean that this material contains that impurity. Actual impurities are a product of the sourced product and its suppliers. Residuals and impurities listed in the HPD are for information purposes only and are not 100% guaranteed to be present in the fabric.
Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: Rollease Acmeda
ADDRESS: 200 Harvard Ave.
Stamford CT 06902, United States
WEBSITE: https://www.rolleaseacmeda.com/us/home

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.