Tempe Fabric by Texstyle, a division of Rollease Acmeda
by Rollease Acmeda

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

**HPD UNIQUE IDENTIFIER:** 21100
**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.

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**Section 1: Summary**

**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 in 7 of 7 Materials
- Explanation(s) provided for Residuals/Impurities?
  - 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.

**MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY | GREENSCREEN SCORE | HAZARD TYPE**

- **PET** POLYETHYLENE TEREPTHALATE LT-UNK
- **MANGANESE OXIDE** LT-PT
- **NITROGEN** NoGS
- **IRON OXIDE** LT-UNK
- **IRON OXIDE** LT-1
- **CARBON BLACK** LT-UNK

**VOLATILE ORGANIC COMPOUND (VOC) CONTENT**

VOC Content data is not applicable for this product category.

**CERTIFICATIONS AND COMPLIANCE**

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

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**Nested Method / Product Threshold**

**Threshold level**
- 100 ppm
- 1,000 ppm
- Per GHS SDS
- Other

**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

One or more substances not disclosed by Name (Specific or Generic) and Identifier and/or one or more Special Condition did not follow guidance.

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**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.

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**VOC CONTENT**

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

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**Preparer:** Self-Prepared
**Verifier:**
**Verification #:**
**Screening Date:** 2019-04-08
**Published Date:** 2020-07-23
**Expiry Date:** 2022-04-08

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hprepository.hpd-collaborative.org

HPD v2.2 created via HPDC Builder Page 1 of 11
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

### PET

<table>
<thead>
<tr>
<th>%: 40.0000 - 50.0000</th>
</tr>
</thead>
</table>

**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:** 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)

### POLYETHYLENE TEREPTHALATE

<table>
<thead>
<tr>
<th>ID: 25038-59-9</th>
</tr>
</thead>
</table>

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

<table>
<thead>
<tr>
<th>%: 40.0000 - 50.0000</th>
</tr>
</thead>
</table>

**GS:** LT-UNK  
**RC:** None  
**NANO:** No  
**SUBSTANCE ROLE:** Polymer species

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

None found  
No warnings found on HPD Priority Hazard Lists
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." 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." http://www.epa.gov/ttn/chief/ap42/ch06/final/cb06s06-2.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**

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

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

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<tr>
<th>%: Impurity/Residual</th>
<th>GS: BM-1</th>
<th>RG: UNK</th>
<th>NANO: No</th>
<th>SUBSTANCE ROLE: Impurity/Residual</th>
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<tbody>
<tr>
<td>HAZARD TYPE</td>
<td>AGENCY AND LIST TITLES</td>
<td>WARNINGS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CANCER</td>
<td>IARC</td>
<td>Group 2b - Possibly carcinogenic to humans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CANCER</td>
<td>CA EPA - Prop 65</td>
<td>Carcinogen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CANCER</td>
<td>US NIH - Report on Carcinogens</td>
<td>Reasonably Anticipated to be Human Carcinogen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CANCER</td>
<td>EU - GHS (H-Statements)</td>
<td>H351 - Suspected of causing cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MULTIPLE</td>
<td>ChemSec - SIN List</td>
<td>CMR - Carcinogen, Mutagen &amp;/or Reproductive Toxicant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CANCER</td>
<td>MAK</td>
<td>Carcinogen Group 2 - Considered to be carcinogenic for man</td>
<td></td>
<td></td>
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<tr>
<td>CANCER</td>
<td>GHS - Japan</td>
<td>Carcinogenicity - Category 1B [H350]</td>
<td></td>
<td></td>
</tr>
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</table>

**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." http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-50532014000400009

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**MANGANESE OXIDE**

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

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

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HPD v2.2 created via HPDC Builder Page 3 of 11
### Nitrogen

**ID:** 7727-37-9  
**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2019-04-08

<table>
<thead>
<tr>
<th>%: Impurity/Residual</th>
<th>GS: NoGS</th>
<th>RC: UNK</th>
<th>NANO: No</th>
<th>SUBSTANCE ROLE: Impurity/Residual</th>
</tr>
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</table>

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

### Zinc Oxide

**ID:** 1314-13-2  
**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2019-04-08

<table>
<thead>
<tr>
<th>%: Impurity/Residual</th>
<th>GS: BM-1</th>
<th>RC: UNK</th>
<th>NANO: No</th>
<th>SUBSTANCE ROLE: Impurity/Residual</th>
</tr>
</thead>
</table>

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

**REPIRATORY**  
AEOC - Asthmagens  
Asthmagens (Rs) - sensitizer-induced

**ACUTE AQUATIC**  
EU - GHS (H-Statements)  
H400 - Very toxic to aquatic life

**CHRON 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

**PRODUCT THRESHOLD:** 100 ppm  
**%: 20.0000 - 30.0000**  
**RESIDUALS AND IMPURITIES CONSIDERED:** Yes  
**MATERIAL TYPE:** Polymeric Material

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HPD v2.2 created via HPDC Builder Page 4 of 11
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.

### Polyacrylic Acid

**ID:** 9003-01-4  
**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2019-04-08  
**%:** 20.0000 - 30.0000  
**GS:** LT-UNK  
**RC:** None  
**NANO:** No  
**SUBSTANCE ROLE:** Binder  
**HAZARD TYPE** | **AGENCY AND LIST TITLES** | **WARNINGS**  
---|---|---  
CANCER | MAK | Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels  
**SUBSTANCE NOTES:** No known residuals or impurities.

### Undisclosed

**%:** 20.0000 - 25.0000  
**PRODUCT THRESHOLD:** 100 ppm  
**RESIDUALS AND IMPURITIES CONSIDERED:** Yes  
**MATERIAL TYPE:** Polymeric Material  
**RESIDUALS AND IMPURITIES NOTES:** Residuals and impurities were considered using the toxnet database. For information about variants and limitations see the section INVENTORY AND SCREENING NOTES.  
**OTHER MATERIAL NOTES:**

### Undisclosed

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2019-04-08  
**%:** 20.0000 - 25.0000  
**GS:** LT-1  
**RC:** UNK  
**NANO:** No  
**SUBSTANCE ROLE:** Flame retardant  
**HAZARD TYPE** | **AGENCY AND LIST TITLES** | **WARNINGS**  
---|---|---  
PBT | OSPAR - Priority PBTs & EDs & equivalent concern | PBT - Chemical for Priority Action  
ENDOCRINE | OSPAR - Priority PBTs & EDs & equivalent concern | Endocrine Disruptor - Chemical for Priority Action  
PBT | EHP - San Antonio Statement on BFRs & CFRs | Flame retardant substance class of concern for PB&T & long range transport  
**SUBSTANCE NOTES:** No known residuals or impurities.

### Undisclosed

**%:** 0.1000 - 1.0000  
**PRODUCT THRESHOLD:** 100 ppm  
**RESIDUALS AND IMPURITIES CONSIDERED:** Yes  
**MATERIAL TYPE:** Geologically Derived Material
**UNDISCLOSED**

**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-1</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>SUBSTANCE ROLE: Heat or UV stabilizer</th>
</tr>
</thead>
</table>

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

**CANCER**  
US CDC - Occupational Carcinogens  
Occupational Carcinogen

**CANCER**  
CA EPA - Prop 65  
Carcinogen - specific to chemical form or exposure route

**CANCER**  
IARC  
Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources

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

**CANCER**  
MAK  
Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value

**CANCER**  
MAK  
Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

**SUBSTANCE NOTES:** Impurities are largely removed in further purification stages

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**YELLOW**

%: 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:**

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**C.I. PIGMENT YELLOW 42**

**ID:** 51274-00-1

**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>
</tr>
</thead>
</table>

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

None found  
No warnings found on HPD Priority Hazard Lists

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

%: 0.1000 - 1.0000

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 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 benzopyrenes, 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. Aenaphthylene, 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%

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.

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CARBON BLACK

ID: 1333-86-4

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

%: 0.1000 - 1.0000
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>CANCER</td>
<td>MAK</td>
<td>Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification</td>
</tr>
</tbody>
</table>

SUBSTANCE 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. 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 sulphur. 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]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. Aenaphthylene, 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%
POLYCYCLIC AROMATIC HYDROCARBONS

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

ID: 130498-29-2

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
AGENCY 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 benzopyrenes, 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:
IRON OXIDE

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

%: 0.1000 - 1.0000
GS: LT-UNK
RC: None
NANO: No
SUBSTANCE ROLE: Pigment

HAZARD TYPE
AGENCY AND LIST TITLES
WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

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.

<table>
<thead>
<tr>
<th>VOC EMISSIONS</th>
<th>CDPH Standard Method V1.2 (Section 01350/CHPS) - Classroom &amp; Office scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>CERTIFYING PARTY:</td>
<td>Self-declared</td>
</tr>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>All facilities are included.</td>
</tr>
<tr>
<td>CERTIFICATE URL:</td>
<td></td>
</tr>
<tr>
<td>ISSUE DATE:</td>
<td>2019-04-08</td>
</tr>
<tr>
<td>EXPIRY DATE:</td>
<td></td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>Berkeley Analytical</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>CONTRACT SERIES TWO SHADING SYSTEM</th>
<th>HPD URL: <a href="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</a></th>
</tr>
</thead>
</table>

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.
MANUFACTURER INFORMATION

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

CONTACT NAME: Lindsey DeSalvo
TITLE: Fabric Brand Manager
PHONE: 203-590-5259
EMAIL: lindsey.desalvo@rolleaseacmeda.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:

=Value![a method for the assessment of exposure or risk associated with product handling or use,
=value![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.