

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 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
% 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.

Threshold Disclosed Per

- Material
- Product

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 TEREPHTHALATE** **LT-UNK** | **ANTIMONY TRIOXIDE** **BM-1** | **CAN** | **MUL** | **MANGANESE OXIDE** **LT-P1** | **REP** | **NITROGEN** **NoGS** | **ZINC OXIDE** **BM-1** | **RES** | **AQU** | **END** | **MUL** | **POLYACRYLIC ACID** [**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

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.

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

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2019-04-08

PUBLISHED DATE: 2020-07-23

EXPIRY DATE: 2022-04-08



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

PET

#: 40.0000 - 50.0000

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: 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/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 TEREPHTHALATE

ID: 25038-59-9

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-04-08

#: 40.0000 - 50.0000

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

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." 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/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)

ANTIMONY TRIOXIDE

ID: 1309-64-4

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

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

#: **Impurity/Residual** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

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

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)

"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 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

MANGANESE OXIDE

ID: 1317-34-6

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

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

#: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
REPRODUCTIVE	GHS - Japan	Toxic to reproduction - Category 1B [H360]

SUBSTANCE NOTES: "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)

NITROGEN

ID: **7727-37-9**

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

#: **Impurity/Residual** GS: **NoGS** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

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**

#: **Impurity/Residual** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (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

#: **20.0000 - 30.0000**

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:

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**

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: Impurities are largely removed in further purification stages

UNDISCLOSED

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: **Heat or UV stabilizer**

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

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:

C.I. PIGMENT YELLOW 42

ID: **51274-00-1**

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.**

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 specific naphthalene as being present in extracts from carbon black. <https://pharosproject.net/uploads/files/sources/3633/0efd85203c1996e46fe2cd0bf42ce5ddbff133a3.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, benz[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.

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**

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
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

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/3633/0efd85203c1996e46fe2cd0bf42ce5ddbff133a3.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. Acenaphthylene, chrysene, benzo[b]fluoranthene, benz[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%

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/3633/0efd85203c1996e46fe2cd0bf42ce5ddbff133a3.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, benz[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**

#: **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.

VOC EMISSIONS

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

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2019-**

EXPIRY DATE:

CERTIFIER OR LAB: **Berkeley**

APPLICABLE FACILITIES: **All facilities are included.**

04-08

Analytical

CERTIFICATE URL:

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.



MANUFACTURER INFORMATION

MANUFACTURER: **Rollease Acmeda**

ADDRESS: **200 Harvard Ave.**

Stamford CT 06902, United States

WEBSITE: <https://www.rolleseeacmeda.com/us/home>

CONTACT NAME: **Lindsey DeSalvo**

TITLE: **Fabric Brand Manager**

PHONE: **203-590-5259**

EMAIL: lindsey.desalvo@rolleseeacmeda.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.