



## 3000 HT Fabric by Texstyle by Rollease Acmeda

## Health Product Declaration v2.2

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 21097

CLASSIFICATION: 12 Furnishings

PRODUCT DESCRIPTION: Included in this HPD is the window shade fabric only. All assembly and system parts are excluded and appear in a separate HPD. This fabric can be used in roller shades and panel track applications to minimize the negative effects of the sun while preserving outward visibility. 3000HT solar screen fabrics have an openness factor of 3% or 5% with a thickness of 0.024 in +/-5% or 0.026 in +/-5% respectively.

### 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 8 of 8 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

All substances disclosed by Name (Specific or Generic) and Identifier.

#### 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**

**PVC [ POLYVINYL CHLORIDE LT-P1 ]** | RES | 1,2-PROPANEDIOL, POLYMER WITH 1,1'-METHYLENEBIS(4-ISOCYANATOBENZENE), 2-METHYLOXIRANE AND OXIRANE NoGS | 1,3-BUTADIENE, 1-CHLORO-, POLYMER WITH 1,3-BUTADIENE AND 2-CHLORO-1,3-BUTADIENE LT-UNK | 2-BUTENE LT-UNK | PHY | ACETYLENE LT-UNK | PHY | BUTENE LT-UNK | ETHYLENE DICHLORIDE (1,2-DICHLOROETHANE) LT-1 | CAN | PHY | SKI | EYE | MUL | HYDROCHLORIC ACID BM-2 | RES | SKI | MAM | IRON LT-P1 | END | PROPYLENE BM-U | PHY | END | SODIUM HYDROXIDE LT-P1 | SKI | PHY | POLYETHYLENE TEPHTHALATE [ 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 | PLASTICIZER [ DI(2-ETHYLHEXYL) TEREPHTHALATE BM-3 | 2-ETHYLHEXYL METHYL TEREPHTHALATE NoGS ] | CALCIUM CARBONATE [ CALCIUM CARBONATE BM-3 ] | TITANIUM DIOXIDE [ TITANIUM DIOXIDE LT-1 | CAN | END ] | ZINC STEARATE [ OCTADECANOIC ACID, ZINC SALT LT-UNK ] | ANTIMONY OXIDE [ ANTIMONY OXIDE (ANTIMONY TRIOXIDE) BM-1 | CAN | AQU | MUL | ANTIMONY, ELEMENTAL LT-1 | AQU | CAN | ANTIMONY TRISULFIDE LT-1 | AQU | CAN | ARSENIC, INORGANIC LT-1 | DEL | CAN | PBT | AQU | MAM | END | MUL | GEN | COPPER LT-UNK | IRON LT-P1 | END | LEAD LT-1 | DEL | CAN | PBT | REP | MUL | END | GEN | NICKEL (METALLIC) LT-1 | RES | CAN | SKI | MAM | MUL | ZINC PYRITHIONE [ ZINC PYRITHIONE BM-1tp ] | MUL ]

Number of Greenscreen BM-4/BM3 contents ... 2

Contents highest concern GreenScreen  
Benchmark or List translator Score ... BM-1  
Nanomaterial ... No

#### INVENTORY AND SCREENING NOTES:

This HPD is reporting substances to 100 ppm for this product 3000 HT. 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.

#### VOLATILE ORGANIC COMPOUND (VOC) CONTENT

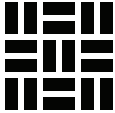
VOC Content data is not applicable for this product category.

#### CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: UL/GreenGuard Gold Certified

# 3000 HT

SUNSHADOW SOLAR SCREEN

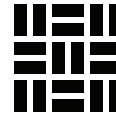


**TEXTSTYLE**

**CONSISTENCY WITH OTHER PROGRAMS**

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified? <input type="radio"/> Yes <input checked="" type="radio"/> No	PREPARER: <b>Self-Prepared</b> VERIFIER: VERIFICATION #:	SCREENING DATE: 2019-04-08 PUBLISHED DATE: 2020-07-23 EXPIRY DATE: 2022-04-08
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**Section 2: Content in Descending Order of Quantity**

*This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:*

- *Basic Inventory method with Product-level threshold.*
- *Nested Material Inventory method with Product-level threshold*
- *Nested Material Inventory method with individual Material-level thresholds*

*Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.2, available on the HPDC website at: [www.hpd-collaborative.org/hpd-2-2-standard](http://www.hpd-collaborative.org/hpd-2-2-standard)*

<b>PVC</b>	<b>%: 40.0000 - 60.0000</b>	
PRODUCT THRESHOLD: <b>100 ppm</b>	RESIDUALS AND IMPURITIES CONSIDERED: <b>Yes</b>	MATERIAL TYPE: <b>Polymeric Material</b>
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were considered using the toxnet database. For more information about this database see RESIDUALS AND IMPURITIES SCREENING NOTES.		
OTHER MATERIAL NOTES: Impurities: ACETYLENE <2.0 ppm; ACIDITY, AS HCL BY wt <0.5 ppm; ALKALINITY, AS NaOH BY wt <0.3 ppm; BUTADIENE <6.0 ppm; 1-BUTENE <3.0 ppm; 2-BUTENE <0.5% ppm; ETHYLENE <4.0 ppm; ETHYLENE DICHLORIDE (EDC) <10.0 ppm; PROPYLENE <8.0 ppm; IRON, BY wt <0.25 ppm/IMPURITY LEVEL IN VINYL CHLORIDE		

<b>POLYVINYL CHLORIDE</b>		<b>ID: 9002-86-2</b>
HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2019-04-08</b>
%: <b>40.0000 - 60.0000</b>	GS: <b>LT-P1</b>	RC: <b>UNK</b> NANO: <b>No</b> SUBSTANCE ROLE: <b>Coating</b>
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
<b>RESPIRATORY</b>	<b>AOEC - Asthmagens</b>	<b>Asthmagen (Rs) - sensitizer-induced</b>
SUBSTANCE NOTES: Impurities: ACETYLENE <2.0 ppm; ACIDITY, AS HCL BY wt <0.5 ppm; ALKALINITY, AS NaOH BY wt <0.3 ppm; BUTADIENE <6.0 ppm; 1-BUTENE <3.0 ppm; 2-BUTENE <0.5% ppm; ETHYLENE <4.0 ppm; ETHYLENE DICHLORIDE (EDC) <10.0 ppm; PROPYLENE <8.0 ppm; IRON, BY wt <0.25 ppm/IMPURITY LEVEL IN VINYL CHLORIDE		
Additional information about residuals can be found here. all are listed as occasional or rare without actual percentages: Tom Lent, Julie Silas, and Jim Vallette, Resilient Flooring & Chemical Hazards: A Comparative Analysis of Vinyl and Other Alternatives for Health Care, Healthy Building Network, April 2009. Available at: <a href="http://www.healthybuilding.net/docs/HBN-ResilientFlooring&amp;ChemicalHazards-Report.pdf">http://www.healthybuilding.net/docs/HBN-ResilientFlooring&amp;ChemicalHazards-Report.pdf</a>		

<b>1,2-PROPANEDIOL, POLYMER WITH 1,1'-METHYLENEBIS(4-ISOCYANATOBENZENE), 2-METHYLOXIRANE AND OXIRANE</b>		<b>ID: 68083-75-0</b>
HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2019-04-08</b>
%: <b>Impurity/Residual</b>	GS: <b>NoGS</b>	RC: <b>UNK</b> NANO: <b>No</b> SUBSTANCE ROLE: <b>Impurity/Residual</b>
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
<b>None found</b>		<b>No warnings found on HPD Priority Hazard Lists</b>

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## SUNSHADOW SOLAR SCREEN



SUBSTANCE NOTES: Impurities: ACETYLENE <2.0 ppm; ACIDITY, AS HCL BY wt <0.5 ppm; ALKALINITY, AS NaOH BY wt <0.3 ppm; BUTADIENE <6.0 ppm; 1-BUTENE <3.0 ppm; 2-BUTENE <0.5% ppm; ETHYLENE <4.0 ppm; ETHYLENE DICHLORIDE (EDC) <10.0 ppm; PROPYLENE <8.0 ppm; IRON, BY wt <0.25 ppm/IMPURITY LEVEL IN VINYL CHLORIDE

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### 1,3-BUTADIENE, 1-CHLORO-, POLYMER WITH 1,3-BUTADIENE AND 2-CHLORO-1,3-BUTADIENE ID: 31900-55-7

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

%: <b>Impurity/Residual</b>	GS: <b>LT-UNK</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Impurity/Residual</b>
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HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Impurities: ACETYLENE <2.0 ppm; ACIDITY, AS HCL BY wt <0.5 ppm; ALKALINITY, AS NaOH BY wt <0.3 ppm; BUTADIENE <6.0 ppm; 1-BUTENE <3.0 ppm; 2-BUTENE <0.5% ppm; ETHYLENE <4.0 ppm; ETHYLENE DICHLORIDE (EDC) <10.0 ppm; PROPYLENE <8.0 ppm; IRON, BY wt <0.25 ppm/IMPURITY LEVEL IN VINYL CHLORIDE

Additional information about residuals can be found here. all are listed as occasional or rare without actual percentages: Tom Lent, Julie Silas, and Jim Vallette, Resilient Flooring & Chemical Hazards: A Comparative Analysis of Vinyl and Other Alternatives for Health Care, Healthy Building Network, April 2009. Available at: <http://www.healthybuilding.net/docs/HBN-ResilientFlooring&ChemicalHazards-Report.pdf>

### 2-BUTENE ID: 107-01-7

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

%: <b>Impurity/Residual</b>	GS: <b>LT-UNK</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Impurity/Residual</b>
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HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H220 - Extremely flammable gas

SUBSTANCE NOTES: Impurities: ACETYLENE <2.0 ppm; ACIDITY, AS HCL BY wt <0.5 ppm; ALKALINITY, AS NaOH BY wt <0.3 ppm; BUTADIENE <6.0 ppm; 1-BUTENE <3.0 ppm; 2-BUTENE <0.5% ppm; ETHYLENE <4.0 ppm; ETHYLENE DICHLORIDE (EDC) <10.0 ppm; PROPYLENE <8.0 ppm; IRON, BY wt <0.25 ppm/IMPURITY LEVEL IN VINYL CHLORIDE

Additional information about residuals can be found here. all are listed as occasional or rare without actual percentages: Tom Lent, Julie Silas, and Jim Vallette, Resilient Flooring & Chemical Hazards: A Comparative Analysis of Vinyl and Other Alternatives for Health Care, Healthy Building Network, April 2009. Available at: <http://www.healthybuilding.net/docs/HBN-ResilientFlooring&ChemicalHazards-Report.pdf>

### ACETYLENE ID: 74-86-2

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

%: <b>Impurity/Residual</b>	GS: <b>LT-UNK</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Impurity/Residual</b>
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## SUNSHADOW SOLAR SCREEN



HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H220 - Extremely flammable gas

SUBSTANCE NOTES: Impurities: ACETYLENE <2.0 ppm; ACIDITY, AS HCL BY wt <0.5 ppm; ALKALINITY, AS NaOH BY wt <0.3 ppm; BUTADIENE <6.0 ppm; 1-BUTENE <3.0 ppm; 2-BUTENE <0.5% ppm; ETHYLENE <4.0 ppm; ETHYLENE DICHLORIDE (EDC) <10.0 ppm; PROPYLENE <8.0 ppm; IRON, BY wt <0.25 ppm/IMPURITY LEVEL IN VINYL CHLORIDE

Additional information about residuals can be found here. all are listed as occasional or rare without actual percentages: Tom Lent, Julie Silas, and Jim Vallette, Resilient Flooring & Chemical Hazards: A Comparative Analysis of Vinyl and Other Alternatives for Health Care, Healthy Building Network, April 2009. Available at: <http://www.healthybuilding.net/docs/HBN-ResilientFlooring&ChemicalHazards-Report.pdf> Impurities: ACETYLENE <2.0 ppm; ACIDITY, AS HCL BY wt <0.5 ppm; ALKALINITY, AS NaOH BY wt <0.3 ppm; BUTADIENE <6.0 ppm; 1-BUTENE <3.0 ppm; 2-BUTENE <0.5% ppm; ETHYLENE <4.0 ppm; ETHYLENE DICHLORIDE (EDC) <10.0 ppm; PROPYLENE <8.0 ppm; IRON, BY wt <0.25 ppm/IMPURITY LEVEL IN VINYL CHLORIDE

Additional information about residuals can be found here. all are listed as occasional or rare without actual percentages: Tom Lent, Julie Silas, and Jim Vallette, Resilient Flooring & Chemical Hazards: A Comparative Analysis of Vinyl and Other Alternatives for Health Care, Healthy Building Network, April 2009. Available at: <http://www.healthybuilding.net/docs/HBN-ResilientFlooring&ChemicalHazards-Report.pdf>

### BUTENE

ID: 25167-67-3

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2019-04-08</b>		
%: <b>Impurity/Residual</b>	GS: <b>LT-UNK</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Impurity/Residual</b>
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		

SUBSTANCE NOTES: Impurities: ACETYLENE <2.0 ppm; ACIDITY, AS HCL BY wt <0.5 ppm; ALKALINITY, AS NaOH BY wt <0.3 ppm; BUTADIENE <6.0 ppm; 1-BUTENE <3.0 ppm; 2-BUTENE <0.5% ppm; ETHYLENE <4.0 ppm; ETHYLENE DICHLORIDE (EDC) <10.0 ppm; PROPYLENE <8.0 ppm; IRON, BY wt <0.25 ppm/IMPURITY LEVEL IN VINYL CHLORIDE

Additional information about residuals can be found here. all are listed as occasional or rare without actual percentages: Tom Lent, Julie Silas, and Jim Vallette, Resilient Flooring & Chemical Hazards: A Comparative Analysis of Vinyl and Other Alternatives for Health Care, Healthy Building Network, April 2009. Available at: <http://www.healthybuilding.net/docs/HBN-ResilientFlooring&ChemicalHazards-Report.pdf>

### ETHYLENE DICHLORIDE (1,2-DICHLOROETHANE)

ID: 107-06-2

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2019-04-08</b>		
%: <b>Impurity/Residual</b>	GS: <b>LT-1</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Impurity/Residual</b>

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## SUNSHADOW SOLAR SCREEN



TEXTSTYLE

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	US EPA - IRIS Carcinogens	(1986) Group B2 - Probable human Carcinogen
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
CANCER	EU - SVHC Authorisation List	Carcinogenic - Banned unless Authorised
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H225 - Highly flammable liquid and vapour
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
CANCER	EU - GHS (H-Statements)	H350 - May cause cancer
CANCER	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
CANCER	Korea - GHS	Carcinogenicity - Category 1 [H350 - May cause cancer]
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
CANCER	Japan - GHS	Carcinogenicity - Category 1B
CANCER	Malaysia - GHS	H350 - May cause cancer
CANCER	Australia - GHS	H350 - May cause cancer

SUBSTANCE NOTES: Impurities: ACETYLENE <2.0 ppm; ACIDITY, AS HCL BY wt <0.5 ppm; ALKALINITY, AS NaOH BY wt <0.3 ppm; BUTADIENE <6.0 ppm; 1-BUTENE <3.0 ppm; 2-BUTENE <0.5% ppm; ETHYLENE <4.0 ppm; ETHYLENE DICHLORIDE (EDC) <10.0 ppm; PROPYLENE <8.0 ppm; IRON, BY wt <0.25 ppm/IMPURITY LEVEL IN VINYL CHLORIDE

Additional information about residuals can be found here. all are listed as occasional or rare without actual percentages: Tom Lent, Julie Silas, and Jim Vallette, Resilient Flooring & Chemical Hazards: A Comparative Analysis of Vinyl and Other Alternatives for Health Care, Healthy Building Network, April 2009. Available at: <http://www.healthybuilding.net/docs/HBN-ResilientFlooring&ChemicalHazards-Report.pdf>

### HYDROCHLORIC ACID

ID: 7647-01-0

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2019-04-08</b>	
%: <b>Impurity/Residual</b>	GS: <b>BM-2</b>	RC: <b>UNK</b>	NANO: <b>No</b> SUBSTANCE ROLE: <b>Impurity/Residual</b>

# 3000 HT

## SUNSHADOW SOLAR SCREEN



TEXTSTYLE

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rr) - irritant-induced
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
MAMMALIAN	EU - GHS (H-Statements)	H331 - Toxic if inhaled
MAMMALIAN	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances

SUBSTANCE NOTES: Impurities: ACETYLENE <2.0 ppm; ACIDITY, AS HCL BY wt <0.5 ppm; ALKALINITY, AS NaOH BY wt <0.3 ppm; BUTADIENE <6.0 ppm; 1-BUTENE <3.0 ppm; 2-BUTENE <0.5% ppm; ETHYLENE <4.0 ppm; ETHYLENE DICHLORIDE (EDC) <10.0 ppm; PROPYLENE <8.0 ppm; IRON, BY wt <0.25 ppm/IMPURITY LEVEL IN VINYL CHLORIDE

Additional information about residuals can be found here. all are listed as occasional or rare without actual percentages: Tom Lent, Julie Silas, and Jim Vallette, Resilient Flooring & Chemical Hazards: A Comparative Analysis of Vinyl and Other Alternatives for Health Care, Healthy Building Network, April 2009. Available at: <http://www.healthybuilding.net/docs/HBN-ResilientFlooring&ChemicalHazards-Report.pdf>

### IRON

ID: 7439-89-6

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2019-04-08</b>		
%: <b>Impurity/Residual</b>	GS: <b>LT-P1</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Impurity/Residual</b>
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		

SUBSTANCE NOTES: Impurities: ACETYLENE <2.0 ppm; ACIDITY, AS HCL BY wt <0.5 ppm; ALKALINITY, AS NaOH BY wt <0.3 ppm; BUTADIENE <6.0 ppm; 1-BUTENE <3.0 ppm; 2-BUTENE <0.5% ppm; ETHYLENE <4.0 ppm; ETHYLENE DICHLORIDE (EDC) <10.0 ppm; PROPYLENE <8.0 ppm; IRON, BY wt <0.25 ppm/IMPURITY LEVEL IN VINYL CHLORIDE

Additional information about residuals can be found here. all are listed as occasional or rare without actual percentages: Tom Lent, Julie Silas, and Jim Vallette, Resilient Flooring & Chemical Hazards: A Comparative Analysis of Vinyl and Other Alternatives for Health Care, Healthy Building Network, April 2009. Available at: <http://www.healthybuilding.net/docs/HBN-ResilientFlooring&ChemicalHazards-Report.pdf>

### PROPYLENE

ID: 115-07-1

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2019-04-08</b>		
%: <b>Impurity/Residual</b>	GS: <b>BM-U</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Impurity/Residual</b>
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H220 - Extremely flammable gas		
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		

# 3000 HT

## SUNSHADOW SOLAR SCREEN



SUBSTANCE NOTES: Impurities: ACETYLENE <2.0 ppm; ACIDITY, AS HCL BY wt <0.5 ppm; ALKALINITY, AS NaOH BY wt <0.3 ppm; BUTADIENE <6.0 ppm; 1-BUTENE <3.0 ppm; 2-BUTENE <0.5% ppm; ETHYLENE <4.0 ppm; ETHYLENE DICHLORIDE (EDC) <10.0 ppm; PROPYLENE <8.0 ppm; IRON, BY wt <0.25 ppm/IMPURITY LEVEL IN VINYL CHLORIDE

Additional information about residuals can be found here. all are listed as occasional or rare without actual percentages: Tom Lent, Julie Silas, and Jim Vallette, Resilient Flooring & Chemical Hazards: A Comparative Analysis of Vinyl and Other Alternatives for Health Care, Healthy Building Network, April 2009. Available at: <http://www.healthybuilding.net/docs/HBN-ResilientFlooring&ChemicalHazards-Report.pdf>

### SODIUM HYDROXIDE

ID: 1310-73-2

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
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
PHYSICAL HAZARD (REACTIVE)	Korea - GHS	H290 - May be corrosive to metals

SUBSTANCE NOTES: Impurities: ACETYLENE <2.0 ppm; ACIDITY, AS HCL BY wt <0.5 ppm; ALKALINITY, AS NaOH BY wt <0.3 ppm; BUTADIENE <6.0 ppm; 1-BUTENE <3.0 ppm; 2-BUTENE <0.5% ppm; ETHYLENE <4.0 ppm; ETHYLENE DICHLORIDE (EDC) <10.0 ppm; PROPYLENE <8.0 ppm; IRON, BY wt <0.25 ppm/IMPURITY LEVEL IN VINYL CHLORIDE

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### POLYETHYLENE TEPHTHALATE

#: **10.0000 - 30.0000**

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 more information about this database see RESIDUALS AND IMPURITIES SCREENING NOTES.

OTHER MATERIAL NOTES:

### POLYETHYLENE TEREPHTHALATE

ID: 25038-59-9

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

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

#: **10.0000 - 30.0000** GS: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Adhesive**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists





**SUBSTANCE NOTES:** 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](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 noncondensable 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 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](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**

# 3000 HT

## SUNSHADOW SOLAR SCREEN



%: **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 catalyze the first reaction, and antimony (III) oxide is most commonly used to catalyze 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 noncondensable 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 catalyze the first reaction, and antimony (III) oxide is most commonly used to catalyze the second step reaction (Ravve, 2000; Stevens, 1999)." (Lithner 2011)

### PLASTICIZER %: 10.0000 - 20.0000

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 more information about this database see RESIDUALS AND IMPURITIES SCREENING NOTES.

OTHER MATERIAL NOTES:

### DI(2-ETHYLHEXYL) TEREPHTHALATE

ID: 6422-86-2

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

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

%: **10.0000 - 20.0000** GS: **BM-3** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: "DEHT is a clear liquid at room temperature and is manufactured at >98% purity. Minor impurities (present at <2%) include 2-ethylhexyl methyl terephthalate (CAS Registry No.: 63468-13-3)." (SIDS)

### 2-ETHYLHEXYL METHYL TEREPHTHALATE

ID: 63468-13-3

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: "DEHT is a clear liquid at room temperature and is manufactured at >98% purity. Minor impurities (present at <2%) include 2-ethylhexyl methyl terephthalate (CAS Registry No.: 63468-13-3)." (SIDS)

### CALCIUM CARBONATE

%: 5.0000 - 20.0000

PRODUCT THRESHOLD: **100 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **Yes**

MATERIAL TYPE: **Geologically Derived Material**

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were considered using the toxnet database. For more information about this database see RESIDUALS AND IMPURITIES SCREENING NOTES.

OTHER MATERIAL NOTES: Impurity Notes: Ideally, the secondary crushing step should reduce the ore to the point where mineral impurities are liberated, typically <100 um, without producing an excess of fines. The material may then be beneficiated through a mineral flotation process in which impurities are floated out.

# 3000 HT

## SUNSHADOW SOLAR SCREEN



### CALCIUM CARBONATE

ID: 471-34-1

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2019-04-08</b>		
%: <b>5.0000 - 20.0000</b>	GS: <b>BM-3</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Filler</b>
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		

SUBSTANCE NOTES: Ideally, the secondary crushing step should reduce the ore to the point where mineral impurities are liberated, typically <100 um, without producing an excess of fines. The material may then be beneficiated through a mineral flotation process in which impurities are floated out.

### TITANIUM DIOXIDE

%: 1.0000 - 10.0000

PRODUCT THRESHOLD: <b>100 ppm</b>	RESIDUALS AND IMPURITIES CONSIDERED: <b>Yes</b>	MATERIAL TYPE: <b>Geologically Derived Material</b>
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RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were considered using the toxnet database. For more information about this database see RESIDUALS AND IMPURITIES SCREENING NOTES.

OTHER MATERIAL NOTES: Impurity Notes: Relatively pure titanium oxide hydrate (TiO(OH)2 or TiO2 dihydrate) is precipitated by hydrolysis of this titanyl sulfate solution. Impurities are largely removed in further purification stages.

### TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2019-04-08</b>		
%: <b>1.0000 - 10.0000</b>	GS: <b>LT-1</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Pigment</b>
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: Relatively pure titanium oxide hydrate (TiO(OH)2 or TiO2 dihydrate) is precipitated by hydrolysis of this titanyl sulfate solution. Impurities are largely removed in further purification stages.

# 3000 HT

## SUNSHADOW SOLAR SCREEN



### ZINC STEARATE

%: 0.5000 - 5.0000

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 more information about this database see RESIDUALS AND IMPURITIES SCREENING NOTES.

OTHER MATERIAL NOTES:

### OCTADECANOIC ACID, ZINC SALT

ID: 557-05-1

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

%: 0.5000 - 5.0000      GS: LT-UNK      RC: UNK      NANO: No      SUBSTANCE ROLE: Heat or UV stabilizer

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

### ANTIMONY OXIDE

%: 0.5000 - 5.0000

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 more information about this database see RESIDUALS AND IMPURITIES SCREENING NOTES.

OTHER MATERIAL NOTES: Trace impurities such as arsenic, copper, iron, lead, and nickel. All are below the threshold level.

### ANTIMONY OXIDE (ANTIMONY TRIOXIDE)

ID: 1309-64-4

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

%: 0.5000 - 5.0000      GS: BM-1      RC: UNK      NANO: No      SUBSTANCE ROLE: Flame retardant

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
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	Japan - GHS	Carcinogenicity - Category 1B

SUBSTANCE NOTES: Trace impurities such as arsenic, copper, iron, lead, and nickel.

# 3000 HT

## SUNSHADOW SOLAR SCREEN



### ANTIMONY, ELEMENTAL

ID: 7440-36-0

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

%: <b>Impurity/Residual</b>	GS: <b>LT-1</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Impurity/Residual</b>
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects		
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man		

SUBSTANCE NOTES: "Common methods of preparation include direct combination of metallic antimony with air or oxygen, roasting of antimony trisulfide, and alkaline hydrolysis of an antimony trihalide and subsequent dehydration of the resulting hydrous oxide." [Kirk-Othmer Encyclopedia of Chemical Technology. 4th ed. Volumes 1: New York, NY. John Wiley and Sons, 1991-Present., p. V3 385]

### ANTIMONY TRISULFIDE

ID: 1345-04-6

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

%: <b>Impurity/Residual</b>	GS: <b>LT-1</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Impurity/Residual</b>
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects		
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man		

SUBSTANCE NOTES: "Common methods of preparation include direct combination of metallic antimony with air or oxygen, roasting of antimony trisulfide, and alkaline hydrolysis of an antimony trihalide and subsequent dehydration of the resulting hydrous oxide." [Kirk-Othmer Encyclopedia of Chemical Technology. 4th ed. Volumes 1: New York, NY. John Wiley and Sons, 1991-Present., p. V3 385]

### ARSENIC, INORGANIC

ID: 7440-38-2

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

%: <b>Impurity/Residual</b>	GS: <b>LT-1</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Impurity/Residual</b>
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# 3000 HT

## SUNSHADOW SOLAR SCREEN



HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
DEVELOPMENTAL	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant
CANCER	US EPA - IRIS Carcinogens	(1986) Group A - Human Carcinogen
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens	Known to be a human Carcinogen
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1
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
MAMMALIAN	EU - GHS (H-Statements)	H301 - Toxic if swallowed
MAMMALIAN	EU - GHS (H-Statements)	H331 - Toxic if inhaled
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CANCER	Korea - GHS	Carcinogenicity - Category 1 [H350 - May cause cancer]
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens
CANCER	Japan - GHS	Carcinogenicity - Category 1A
GENE MUTATION	MAK	Germ Cell Mutagen 3a
CANCER	Australia - GHS	H350 - May cause cancer

SUBSTANCE NOTES:

### COPPER

ID: 7440-50-8

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

%: **Impurity/Residual**      GS: **LT-UNK**      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:

### IRON

ID: 7439-89-6

# 3000 HT

## SUNSHADOW SOLAR SCREEN



**TEXTSTYLE**

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2019-04-08</b>	
%: <b>Impurity/Residual</b>	GS: <b>LT-P1</b>	RC: <b>UNK</b>	NANO: <b>No</b> SUBSTANCE ROLE: <b>Impurity/Residual</b>
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS	
<b>ENDOCRINE</b>	<b>TEDX - Potential Endocrine Disruptors</b>	<b>Potential Endocrine Disruptor</b>	
SUBSTANCE NOTES:			

**LEAD**

ID: **7439-92-1**

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2019-04-08</b>	
%: <b>Impurity/Residual</b>	GS: <b>LT-1</b>	RC: <b>UNK</b>	NANO: <b>No</b> SUBSTANCE ROLE: <b>Impurity/Residual</b>
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS	
<b>DEVELOPMENTAL</b>	<b>G&amp;L - Neurotoxic Chemicals</b>	<b>Developmental Neurotoxicant</b>	
<b>CANCER</b>	<b>US EPA - IRIS Carcinogens</b>	<b>(1986) Group B2 - Probable human Carcinogen</b>	
<b>CANCER</b>	<b>IARC</b>	<b>Group 2a - Agent is probably Carcinogenic to humans</b>	
<b>CANCER</b>	<b>IARC</b>	<b>Group 2b - Possibly carcinogenic to humans</b>	
<b>CANCER</b>	<b>CA EPA - Prop 65</b>	<b>Carcinogen</b>	
<b>DEVELOPMENTAL</b>	<b>CA EPA - Prop 65</b>	<b>Developmental toxicity</b>	
<b>PBT</b>	<b>US EPA - Priority PBTs (NWMP)</b>	<b>Priority PBT</b>	
<b>PBT</b>	<b>WA DoE - PBT</b>	<b>PBT</b>	
<b>REPRODUCTIVE</b>	<b>CA EPA - Prop 65</b>	<b>Reproductive Toxicity - Female</b>	
<b>REPRODUCTIVE</b>	<b>CA EPA - Prop 65</b>	<b>Reproductive Toxicity - Male</b>	
<b>CANCER</b>	<b>US NIH - Report on Carcinogens</b>	<b>Reasonably Anticipated to be Human Carcinogen</b>	
<b>PBT</b>	<b>US EPA - Toxics Release Inventory PBTs</b>	<b>PBT</b>	
<b>REPRODUCTIVE</b>	<b>EU - SVHC Authorisation List</b>	<b>Toxic to reproduction - Candidate list</b>	
<b>PBT</b>	<b>OSPAR - Priority PBTs &amp; EDs &amp; equivalent concern</b>	<b>PBT - Chemical for Priority Action</b>	
<b>PBT</b>	<b>OR DEQ - Priority Persistent Pollutants</b>	<b>Priority Persistent Pollutant - Tier 1</b>	
<b>DEVELOPMENTAL</b>	<b>US NIH - Reproductive &amp; Developmental Monographs</b>	<b>Clear Evidence of Adverse Effects - Developmental Toxicity</b>	
<b>REPRODUCTIVE</b>	<b>US NIH - Reproductive &amp; Developmental Monographs</b>	<b>Clear Evidence of Adverse Effects - Reproductive Toxicity</b>	
<b>REPRODUCTIVE</b>	<b>EU - GHS (H-Statements)</b>	<b>H360FD - May damage fertility. May damage the unborn child</b>	
<b>DEVELOPMENTAL</b>	<b>EU - GHS (H-Statements)</b>	<b>H362 - May cause harm to breast-fed children</b>	
<b>REPRODUCTIVE</b>	<b>EU - REACH Annex XVII CMRs</b>	<b>Toxic to Reproduction Category 1 - Substances known to impair fertility or cause Developmental Toxicity in humans</b>	



# 3000 HT

## SUNSHADOW SOLAR SCREEN



MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
CANCER	Korea - GHS	Carcinogenicity - Category 1 [H350 - May cause cancer]
REPRODUCTIVE	Korea - GHS	Reproductive toxicity - Category 1 [H360 - May damage fertility or the unborn child]
REPRODUCTIVE	New Zealand - GHS	6.8A - Known or presumed human reproductive or developmental toxicants
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1A
GENE MUTATION	MAK	Germ Cell Mutagen 3a
REPRODUCTIVE	EU - Annex VI CMRs	Reproductive Toxicity - Category 1A
DEVELOPMENTAL	Australia - GHS	H360Df - May damage the unborn child. Suspected of damaging fertility

SUBSTANCE NOTES:

### NICKEL (METALLIC)

ID: 7440-02-0

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

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

%: **Impurity/Residual**

GS: **LT-1**

RC: **UNK**

NANO: **No**

SUBSTANCE ROLE: **Impurity/Residual**

# 3000 HT

## SUNSHADOW SOLAR SCREEN



HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens	Known to be a human Carcinogen
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES:

### ZINC PYRITHIONE

#: 0.1000 - 1.0000

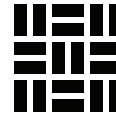
PRODUCT THRESHOLD: 100 ppm      RESIDUALS AND IMPURITIES CONSIDERED: Yes      MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were considered using the toxnet database. For more information about this database see RESIDUALS AND IMPURITIES SCREENING NOTES.

OTHER MATERIAL NOTES:

# 3000 HT

SUNSHADOW SOLAR SCREEN

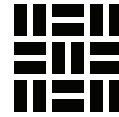


## ZINC PYRITHIONE

ID: 13463-41-7

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2019-04-08</b>		
%: <b>0.1000 - 1.0000</b>	GS: <b>BM-1tp</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Biocide</b>
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
<b>MULTIPLE</b>	<b>German FEA - Substances Hazardous to Waters</b>	<b>Class 3 - Severe Hazard to Waters</b>		

SUBSTANCE NOTES:



## 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	UL/GreenGuard Gold Certified		
CERTIFYING PARTY: <b>Third Party</b>	ISSUE DATE: <b>2012-12-22</b>	EXPIRY DATE: <b>2022-12-22</b>	CERTIFIER OR LAB: <b>UL</b>
APPLICABLE FACILITIES: <b>This is not facility specific</b>			
CERTIFICATE URL:			
CERTIFICATION AND COMPLIANCE NOTES: <b>Certificate # 75170-420</b>			

## 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.*

<b>CONTRACT SERIES TWO SHADING SYSTEM</b>	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>
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CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:  
This is the shading system.

## Section 5: General Notes

This inventory is reported to 100 ppm with possible residuals and impurities noted. This HPD is reporting substances to 100 ppm for this product 3000 HT. 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, USA**  
WEBSITE: <http://www.rolleseeacmeda.com/us/home>

CONTACT NAME: **Lindsey DeSalvo**  
TITLE: **Product Manager-Fabric**  
PHONE: **203-590-5259**  
EMAIL: [lindsey.desalvo@rolleseeacmeda.com](mailto: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

<b>AQU</b> Aquatic toxicity	<b>LAN</b> Land toxicity	<b>PHY</b> Physical hazard (flammable or reactive)
<b>CAN</b> Cancer	<b>MAM</b> Mammalian/systemic/organ toxicity	<b>REP</b> Reproductive
<b>DEV</b> Developmental toxicity	<b>MUL</b> Multiple	<b>RES</b> Respiratory sensitization
<b>END</b> Endocrine activity	<b>NEU</b> Neurotoxicity	<b>SKI</b> Skin sensitization/irritation/corrosivity
<b>EYE</b> Eye irritation/corrosivity	<b>NF</b> Not found on Priority Hazard Lists	<b>UNK</b> Unknown
<b>GEN</b> Gene mutation	<b>OZO</b> Ozone depletion	
<b>GLO</b> Global warming	<b>PBT</b> Persistent, bioaccumulative, and toxic	

#### GreenScreen (GS)

<b>BM-4</b> Benchmark 4 (prefer-safer chemical)	<b>LT-1</b> List Translator 1 (Likely Benchmark-1)
<b>BM-3</b> Benchmark 3 (use but still opportunity for improvement)	<b>LT-UNK</b> 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.)
<b>BM-2</b> Benchmark 2 (use but search for safer substitutes)	<b>NoGS</b> No GreenScreen.
<b>BM-1</b> Benchmark 1 (avoid - chemical of high concern)	
<b>BM-U</b> Benchmark Unspecified (due to insufficient data)	
<b>LT-P1</b> List Translator Possible 1 (Possible Benchmark-1)	

#### 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.*