created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 31703 CLASSIFICATION: 12 05 13 Fabrics

PRODUCT DESCRIPTION: 100 Vinyl upholstery materials

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

C Nested Materials Method

Threshold Disclosed Per

Basic Method

 Material Product **Threshold Level**

C 100 ppm ⊙ 1,000 ppm

C Per GHS SDS

Other

Residuals/Impurities Evaluation

C Completed

Partially Completed

Explanation(s) provided:

Yes ○ No

O Not Completed

For all contents above the threshold, the manufacturer has:

Characterized

Provided weight and role.

Screened

Provided screening results using HPDC-approved

methods.

Identified

Yes ○ No

○ Yes
○ No

Provided name and CAS RN or other 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.

PRODUCT | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY

GREENSCREEN SCORE | HAZARD TYPE

TANGRAM [POLYVINYL CHLORIDE LT-P1 | MAM BIS(2-ETHYLHEXYL) TEREPHTHALATE BM-3dg POLYETHYLENE TEREPHTHALATE (PET) LT-P1 ALUMINA TRIHYDRATE (PRIMARY CASRN IS 21645-51-2) BM-2 | SKI | EYE POLYURETHANE RESINS **DERIVED FROM THE REACTION OF DIPHENYLMETHANE DIISOCYANATE WITH 1.3-PROPANEDIOL AND** POLYTETRAMETHYLENE ETHER GLYCOL NoGS TRIS(2-ETHYLHEXYL) TRIMELLITATE BM-U | END TITANIUM DIOXIDE LT-1* | CAN | END | MAM UNDISCLOSED Not Screened UNDISCLOSED Not Screened 2,2,4-TRIMETHYL-1,3-PENTANEDIOL DIISOBUTYRATE LT-P1 | END | AQU 1,1'-AZOBIS(FORMAMIDE) LT-UNK | PHY | RES]

Number of Greenscreen BM-4/BM3 contents ... 1

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

The product was screened to 1000 ppm and all substances above 1000 ppm have been disclosed

*Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. For this reason, this score is intentionally omitted from the "Contents highest concern" line above. See HPDC's Special Conditions policy for more information.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listinas.

VOC emissions: UL/GreenGuard Gold Certified

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

O Yes No

PREPARER: Self-Prepared

VERIFIER: VERIFICATION #: **SCREENING DATE: 2023-02-20** PUBLISHED DATE: 2023-03-13

EXPIRY DATE: 2026-02-20



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 2.3, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-3-standard

TANGRAM

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Partially

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities above the disclosed threshold level.

OTHER PRODUCT NOTES:

POLYVINYL CHLORIDE				ID: 9002-8
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD S	CREENING DATE:	2023-02-20 7:00:51
%: 35.5600 - 35.5600	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
MAM	GHS - Japan		repeated exposi	damage to organs through prolonged o ure [Specific target organs/systemic g repeated exposure - Category 1]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Perkins+Will (P+W)		P&W - Precautio	onary List
			Precautionary lis	st of substances recommended for
RESTRICTED LIST	Cradle to Cradle Products Innov Institute (C2CPII)	ation		Product Standard Restricted (RSL) - Effective July 1, 2022
			Core Restriction	s
RESTRICTED LIST	International Living Future Instit	ute (ILFI)	0 0	Challenge 4.0 - Red List of Materials & ective April 1, 2022
			Red List substar Challenge V4.0 p	nces to avoid in Living Building projects

BIS(2-ETHYLHEXYL) TEREPHTHALATE

SUBSTANCE NOTES: PVC film used as base material

ID: 6422-86-2

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	2023-02-20 7:00:51
%: 24.5400 - 24.5400	GreenScreen: BM-3dg	RC: None	NANO: No	SUBSTANCE ROLE: Plasticizer
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No warr	nings found on HPD Priority Hazard Lists

Tangram

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals
		Some Solvents

POLYETHYLENE TEREPH	ITHALATE (PET)			ID: 25038-59-9
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	ary HAZARD SCREENING DATE: 2023-02-20 7:00:52		
%: 20.7800 - 20.7800	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No v	warnings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATIO	DN
None found				No listings found on Additional Hazard Lists

ALUMINA TRIHYDRATE (PRIMARY CASRN IS 21645-51-2)

SUBSTANCE NOTES: Polyester textile backing material

SUBSTANCE NOTES: DOTP used as plasticizer in the manufacture of PVC

ID: 8064-00-4

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2023-02-20 7:00:53
%: 6.9400 - 6.9400	GreenScreen: BM-2	RC: None NANO: No SUBSTANCE ROLE: Filler
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innov Institute (C2CPII)	ation C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innov Institute (C2CPII)	ation C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Children's Products

SUBSTANCE NOTES: This substance is used as a filler

POLYURETHANE RESINS DERIVED FROM THE REACTION OF DIPHENYLMETHANE DIISOCYANATE WITH 1,3-PROPANEDIOL AND POLYTETRAMETHYLENE ETHER GLYCOL

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-20 7:00:53

%: 4.1900 - 4.1900	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Antistain
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No warni	ngs found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No lis	stings found on Additional Hazard Lists

TRIS(2-ETHYLHEXYL) TRIMELLITATE

TITANIUM DIOXIDE

SUBSTANCE NOTES: Polyurethane top coat mixture used for stain protection

SUBSTANCE NOTES: Plasticizer used in manufacture of PVC

ID: 3319-31-1

ID: 13463-67-7

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	2023-02-20 7:00:52
%: 3.5200 - 3.5200	GreenScreen: BM-U	RC: None	NANO: No	SUBSTANCE ROLE: Plasticizer
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
END	TEDX - Potential Endocrine Disr	uptors	Potential Endocri	ne Disruptor
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Green Science Policy Institute (0	GSPI)	GSPI - Six Classe	es of Problematic Chemicals
			Bisphenols and F	Phthalates

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-20 7:00:53

%: 3.1500 - 3.1500 GreenScreen: LT-1 RC: None NANO: No SUBSTANCE ROLE: Pigment

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen**
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route**
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources**
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value**
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor**
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels**
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]**
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]**
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]**
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen**
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Cosmetics & Personal Care Products
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE Safer Chemicals Ingredients list (SCIL)
	,	Colorants - Green Circle (Verified Low Concern)

SUBSTANCE NOTES: This substance is used as a pigment.

^{**}Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. See HPDC's Special Conditions policy for more information. Manufacturer's Safety Data Sheet (SDS), if applicable, may offer occupational health and safety information.

UNDISCLOSED				ID: Undisclosed
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	Not Screened
%: 0.5600 - 0.5600	GreenScreen: Not Screened	RC: None	NANO: No	SUBSTANCE ROLE: Dye
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
	Hazard Screening not performed	i		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
	Additional Hazard Screening not	performed		

UNDISCLOSED				ID: Undisclosed
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DAT	E: Not Screened
%: 0.4900 - 0.4900	GreenScreen: Not Screened	RC: None	NANO: No	SUBSTANCE ROLE: Heat or UV stabilizer
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
	Hazard Screening not performed	d		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATIO	N .
	Additional Hazard Screening not	t performed		

2,2,4-TRIMETHYL-1,3-PENTANEDIOL DIISOBUTYRATE

SUBSTANCE NOTES: This substance is a heat stabilizer

ID: 6846-50-0

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	2023-02-20 7:00:54
%: 0.2100 - 0.2100	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Plasticizer
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
END	TEDX - Potential Endocrine Disr	uptors	Potential Endocr	ine Disruptor
AQU	GHS - Japan		H401 - Toxic to a environment (acu	equatic life [Hazardous to the aquatic stee) - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Green Science Policy Institute (0	GSPI)	GSPI - Six Classe	es of Problematic Chemicals
			Some Solvents	

SUBSTANCE NOTES: Plasticizer used in manufacture of PVC

I, I - AZOBIS(FORMAMIDE)		ID: 123-77-3
HAZARD DATA SOURCE: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2023-02-20 7:00:54	

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	JREENING DATE:	2023-02-20 7:00:54	
%: 0.0500 - 0.0500	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Blowing agent	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
PHY	GHS - New Zealand	GHS - New Zealand		Flammable solids category 1	
PHY	GHS - Japan	GHS - Japan		H225 - Highly flammable liquid and vapour [Flammable solids - Category 1]	
RES	EU - SVHC Authorisation List	EU - SVHC Authorisation List		Equivalent Concern - Candidate List: Respiratory sensitizing	
RES	EU - SVHC Authorisation List	EU - SVHC Authorisation List		Equivalent Concern - Prioritization List: Respiratory sensitizing	

ADDITIONAL LISTINGS LIST NAME AND SOURCE NOTIFICATION

None found No listings found on Additional Hazard Lists

SUBSTANCE NOTES: This substance is a blowing agent



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: Third Party APPLICABLE FACILITIES: Indoor Facilities ISSUE DATE: 2023-03-11

EXPIRY DATE:

CERTIFIER OR LAB: UL

CERTIFICATE URL: CERTIFICATION AND COMPLIANCE NOTES: UL Greenguard Gold



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.

No accessories are required for this product.

Section 5: General Notes

Tangram is 100% Vinyl upholstery material that does not contain harmful Phthalates.

Does not contain antimicrobials, Flame retardants.

Cleaning code: WS, Bleach cleanable (10:1), Denim Dye resistant

MANUFACTURER INFORMATION

MANUFACTURER: Designtex ADDRESS: 357 County Avenue Secaucus NJ 07094, USA WEBSITE: www.Designtex.com CONTACT NAME: Adity Phadnis TITLE: Product Compliance PHONE: 201-917-7743

EMAIL: aphadnis@designtex.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

NoGS No GreenScreen.

GreenScreen Benchmark scores sometimes also carry subscripts, which provide more context for how the score was determined. These are DG (data gap), TP (transformation product), and CoHC (chemical of high concern). For more information, see 2.2.2.4 GreenScreen® for Safer Chemicals, www.greenscreenchemicals.org, and Best Practices for Hazard Screening on the HPDC website (hpd-collaborative.org).

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.