

HPD UNIQUE IDENTIFIER: 27939

CLASSIFICATION: 12 36 61.16 Solid Surfacing Countertops

PRODUCT DESCRIPTION: ElementAI surfaces takes plastic from the post-industrial waste stream and converts it into a stunning, easily machined solid surface that not only performs well, but offers a seamless solution to an industry problem of recycling.

Section 1: Summary

Basic 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 ☒ Considered ☐ Partially Considered ☐ Not Considered Explanation(s) provided for Residuals/Impurities? ☒ Yes ☐ No	<i>All Substances Above the Threshold Indicated Are:</i> Characterized ☐ Yes Ex/SC ☒ Yes ☐ No <i>% weight and role provided for all substances.</i> Screened ☐ Yes Ex/SC ☒ Yes ☐ No <i>All substances screened using Priority Hazard Lists with results disclosed.</i> Identified ☐ Yes Ex/SC ☒ Yes ☐ No <i>All substances disclosed by Name (Specific or Generic) and Identifier.</i>
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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

ELEMENTAL - RECYCLED SOLID SURFACE (LIGHT) | EUDRAGIT E 30D
LT-UNK | METHYL METHACRYLATE | LT-P1 | END | SKI | RES | PHY
HEXANEPEROXOIC ACID, 2-ETHYL-, 1,1-DIMETHYLETHYL ESTER (9CI)
LT-P1 | MUL 1,1-BIS(T-BUTYLPEROXY)-3,3,5-
TRIMETHYLCYCLOHEXANE | LT-P1 | PBT | MUL | REP **DIBUTYL**
PHTHALATE (DBP) | LT-1 | CAN | END | MUL | REP | DEV | AQU]

Number of Greenscreen BM-4/BM3 contents ... 0

Contents highest concern GreenScreen Benchmark or List translator Score ... LT-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

ElementAI worked with the HPDC Approved Preparer to confirm that all intentionally added ingredients, residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold.

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: No VOC Certification

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified? ☐ Yes ☒ No	PREPARER: ToxServices LLC VERIFIER: VERIFICATION #:	SCREENING DATE: 2022-03-23 PUBLISHED DATE: 2022-03-25 EXPIRY DATE: 2025-03-23
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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

ELEMENTAL - RECYCLED SOLID SURFACE (LIGHT)

PRODUCT THRESHOLD: 1000 ppm		RESIDUALS AND IMPURITIES CONSIDERED: Yes	
RESIDUALS AND IMPURITIES NOTES: ElementAI worked with the HPDC Approved Preparer to confirm that all residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold.			
OTHER PRODUCT NOTES:			
EUDRAGIT E 30D		ID: 9010-88-2	
HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-03-23 6:34:22	
%: 94.0171 - 94.0171	GS: LT-UNK	RC: PostC	NANO: No SUBSTANCE ROLE: Structure component
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS	
None found		No warnings found on HPD Priority Hazard Lists	
SUBSTANCE NOTES: The supplier confirmed that the material is 93% post-consumer recycled content.			

METHYL METHACRYLATE
 ID: 80-62-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-03-23 6:35:57	
%: 5.9709 - 5.9709		GS: LT-P1	RC: None NANO: No SUBSTANCE ROLE: Tensile strength additive
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS
END	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor
SKI	MAK		Sensitizing Substance Sh - Danger of skin sensitization
RES	AOEC - Asthmagens		Asthmagen (Rs) - sensitizer-induced
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1		H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1		H317 - May cause an allergic skin reaction [Skin sensitization - Category 1]
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1		H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
SUBSTANCE NOTES:			

HEXANEPEROXOIC ACID, 2-ETHYL-, 1,1-DIMETHYLETHYL ESTER (9CI)
 ID: 3006-82-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-03-23 6:37:08	
%: 2.9915 - 2.9915	GS: LT-P1	RC: None	NANO: No SUBSTANCE ROLE: Tensile strength additive

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SUBSTANCE NOTES:		

1,1-BIS(T-BUTYLPEROXY)-3,3,5-TRIMETHYLCYCLOHEXANE

ID: 6731-36-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-03-23 6:37:35		
%: 1.4957 - 1.4957		GS: LT-P1		RC: None NANO: No SUBSTANCE ROLE: Tensile strength additive
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
PBT	EC - CEPA DSL		Persistent, Bioaccumulative and inherently Toxic (PBiTE) to the Environment (based on aquatic organisms)	
MUL	German FEA - Substances Hazardous to Waters		Class 2 - Hazard to Waters	
REP	GHS - New Zealand		Reproductive toxicity category 1	
SUBSTANCE NOTES:				

DIBUTYL PHTHALATE (DBP)

ID: 84-74-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-03-23 6:38:06		
%: 1.4957 - 1.4957	GS: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Tensile strength additive

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
END	OSPAR - Priority PBTs & EDs & equivalent concern	Endocrine Disruptor - Chemical for Priority Action
MUL	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
MUL	US EPA - PPT Chemical Action Plans	TSCA Work Plan chemical - Action Plan in development
REP	US EPA - PPT Chemical Action Plans	Reproductive effects
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 1B
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
DEV	CA EPA - Prop 65	Developmental toxicity
DEV	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
REP	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Reproductive Toxicity
REP	EU - REACH Annex XVII CMRs	Toxic to Reproduction Category 2 - Substances which should be regarded as if they impair fertility or cause Developmental Toxicity in humans
REP	EU - SVHC Authorisation List	Toxic to reproduction - Banned unless Authorised
REP	CA EPA - Prop 65	Reproductive Toxicity - Female
REP	CA EPA - Prop 65	Reproductive Toxicity - Male
END	EU - Priority Endocrine Disruptors	Category 1 - In vivo evidence of Endocrine Disruption Activity
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
REP	GHS - Korea	H360 - May damage fertility or the unborn child [Category 1(1B)]
DEV	GHS - Australia	H360Df - May damage the unborn child. Suspected of damaging fertility [Reproductive toxicity - Category 1A or 1B]
DEV	GHS - Malaysia	H360Df - May damage the unborn child. Suspected of damaging fertility [Reproductive toxicity - Category 1A or 1B]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
DEV	EU - GHS (H-Statements) Annex 6 Table 3-1	H360Df - May damage the unborn child. Suspected of damaging fertility [Reproductive toxicity - Category 1A or 1B]
REP	GHS - New Zealand	Reproductive toxicity category 1
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	No VOC Certification		
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2022-03-	EXPIRY DATE:	CERTIFIER OR LAB: N/A
APPLICABLE FACILITIES: N/A	23		
CERTIFICATE URL:			
CERTIFICATION AND COMPLIANCE NOTES:			

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

ElementAI worked with the HPDC Approved Preparer to confirm that all intentionally added ingredients, residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold.

MANUFACTURER INFORMATION

MANUFACTURER: **elementAI**
 ADDRESS: **1406 Transport Drive**
Raleigh NC 27603, USA
 WEBSITE: **www.caragreen.com**

CONTACT NAME: **Jessica McNaughton**
 TITLE: **President**
 PHONE: **919-929-3009**
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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	LAN Land toxicity	PHY Physical hazard (flammable or reactive)
CAN Cancer	MAM Mammalian/systemic/organ toxicity	REP Reproductive
DEV Developmental toxicity	MUL Multiple	RES Respiratory sensitization
END Endocrine activity	NEU Neurotoxicity	SKI Skin sensitization/irritation/corrosivity
EYE Eye irritation/corrosivity	NF Not found on Priority Hazard Lists	UNK Unknown
GEN Gene mutation	OZO Ozone depletion	
GLO Global warming	PBT Persistent, bioaccumulative, and toxic	

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	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.)
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)	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.