Tiikeri
by TorZo Surfaces

Health Product Declaration v2.1

created via: HPDC Online Builder

CLASSIFICATION: 06 83 13.00 Wood, Plastics, and Composites (Framing): Resin Composite Paneling

PRODUCT DESCRIPTION: Bold and exotic, Tiikeri's tiger-like stripes come from strands of sorghum straw. This sustainable surface material's striking pattern will liven any environment, whether it's used vertically in panels or horizontally in flooring. Like all TorZo products, Tiikeri contains no added urea formaldehyde and can contribute to LEED® certification when used in green building projects. Also includes CSI 09 64 29: Resin Infused Composite Flooring; and CSI 09 78 00: Resin Infused Composite Wall Panels.

Section 1: Summary

Basic 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
- ○ Per OSHA MSDS
- ○ Other

Residuals/Impurities

- ◉ Considered
- ○ Partially Considered
- ○ Not Considered

Explanation(s) provided for Residuals/Impurities?

- ◉ Yes ○ No

Are All Substances Above the Threshold Indicated:

Characterized ◉ Yes ○ No

Percent Weight and Role Provided?

Screened ◉ Yes ○ No

Using Priority Hazard Lists with Results Disclosed?

Identified ○ Yes ◉ No

Name and Identifier Provided?

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

TIIKERI SURFACE [UNDISCLOSED NoGS SORGHUM NoGS POPLAR NoGS CALCIUM CARBONATE BM-3 WATER BM-4 METHYLENE BISPHENYL DIISOCYANATE (PURE MDI) LT-UNK | RES | MUL | SKI | EYE | CAN POLYVINYL ACETATE (PVA) LT-UNK POLYMERIC MDI (PMDI) LT-UNK | RES | MUL | CAN *UNDISCLOSED* LT-UNK | SKI *UNDISCLOSED* LT-UNK | SKI | EYE *UNDISCLOSED* LT-UNK]

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

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

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

This Health Product Declaration (HPD) was completed in accordance with the HPD Standard version 2.1, and discloses hazards associated with all substances present at or above 1000 parts per million (ppm) in the finished product, along with the role and percent weight. Therefore, this HPD is consistent with the LEED v4 MR credit Building Product Disclosure and Optimization: Material Ingredient Reporting (Option 1). Substances not "Identified" are those considered proprietary, or are those without a registered identifier.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

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

VOC emissions: CDPH/EHLB/SM V1.1, 2010 (CA 01350)

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: 2018-09-18
PUBLISHED DATE: 2018-09-18
EXPIRY DATE: 2021-09-18

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 2.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-standard

TIIKERI SURFACE

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities were “Considered”, based on HPDC Emerging Best Practices. No residuals or impurities are known or expected to be present at or above the Content Inventory Threshold indicated that have a GS score of BM-1, LT-1, LT-P1 or NoGS, based on information provided in supplier disclosure letters, supplier SDS, and as predicted by process chemistry (Pharos CML). However, since process chemistry has not yet been researched for the Acrylic Resin, all potential residuals of this substance have been disclosed based on manufacturer formulation.

OTHER PRODUCT NOTES: Except where otherwise noted, substances used for pigmentation/coloration were each found to be below the threshold for reporting in this HPD (1000 ppm); however, all known pigment substances reviewed returned a GreenScreen score of LT-UNK.

UNDISCLOSED

%: **54.5000 - 55.2000** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Acrylic Resin**

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: This ingredient is held as proprietary by the manufacturer; however, all known hazards have been disclosed. Listed as "inert" material by TOXNET (http://chem.sis.nlm.nih.gov). Not a dangerous substance according to CLP - GHS. This substance is not classified as dangerous according to Directive 67/548/EEC and CE 1272/2008. This material is not considered hazardous by the OSHA Hazard Communication Standard (29 1910.1200).

SORGHUM

ID: **Not registered**

%: **40.1000 - 40.5000** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Sorghum Board Substrate**

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: Sorghum straw is post-agricultural by-product from harvest of the sorghum food crop.

POPLAR

ID: **Not registered**

%: **2.0000 - 2.3000** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Sorghum Board Substrate**

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES:

CALCIUM CARBONATE

ID: 471-34-1

%: 0.9000 - 2.7000 GS: BM-3 RC: None NANO: No ROLE: Sorghum Board Adhesive/Binder

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: Identified on the US EPA Safer Chemical Ingredient List.

WATER

ID: 7732-18-5

%: 0.5000 - 1.6000 GS: BM-4 RC: None NANO: No ROLE: Solvent, Diluent

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: Most water evaporates off during curing/drying process.

METHYLENE BISPHENYL DIISOCYANATE (PURE MDI)

ID: 101-68-8

%: 0.4000 - 1.2000 GS: LT-UNK RC: None NANO: No ROLE: Sorghum Board Adhesive/Binder

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
RESPIRATORY	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
RESPIRATORY	US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction

SUBSTANCE NOTES:

POLYVINYL ACETATE (PVA)

ID: 9003-20-7

%: 0.4000 - 1.4000 GS: LT-UNK RC: None NANO: No ROLE: Sorghum Board Adhesive/Binder

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: Identified on the US EPA Safer Chemical Ingredient List.

POLYMERIC MDI (PMDI)

ID: 9016-87-9

%: 0.3000 - 2.0000 GS: LT-UNK RC: None NANO: No ROLE: Sorghum Board Adhesive/Binder

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
RESPIRATORY	US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES:

UNDISCLOSED

%: Impurity/Residual GS: LT-UNK RC: None NANO: No ROLE: Impurity/Residual

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction

SUBSTANCE NOTES: Monomer that is expected to be completely converted in the production of the acrylic resin. This ingredient is held as proprietary by the manufacturer; however, all hazards are disclosed.

UNDISCLOSED

%: Impurity/Residual GS: LT-UNK RC: None NANO: No ROLE: Impurity/Residual

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation

EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction

SUBSTANCE NOTES: Monomer that is expected to be completely converted in the production of the acrylic resin. This ingredient is held as proprietary by the manufacturer; however, all hazards are disclosed.

UNDISCLOSED

%: **Impurity/Residual** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: Reaction initiator that is expected to be thoroughly degraded in the finished product. This ingredient is held as proprietary by the manufacturer; however all hazards are disclosed.

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/EHLB/SM V1.1, 2010 (CA 01350)**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Specialty Polymers/TorZo Surfaces Woodburn, OR 97071
CERTIFICATE URL:

ISSUE DATE: 2013-10-10

EXPIRY DATE:

CERTIFIER OR LAB: Eurofins Air Toxics, Inc.

CERTIFICATION AND COMPLIANCE NOTES: Certificate No.: 18571-1309018. Reference Standard: CDPH/EHLB/SM V1.1, 2010 “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, Version 1.1” (CA 01350). Complies with the ≤1/2 CA CREL and formaldehyde maximum allowable concentration criteria specified in SMV1.1 Table 4.1, when modeled for wallcovering area in the classroom environment and flooring area in the office environment, as defined in Tables 4.2 - 4.5.

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.

TITEBOND II (VOC: 5.5 G/L) — HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:
Optional adhesive for gluing Tiikeri during installation.

Section 5: General Notes

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **TorZo Surfaces**
ADDRESS: **2475 Progress Way**
Woodburn OR 97071, USA
WEBSITE: **www.TorZoSurfaces.com/products/Tiikeri**

CONTACT NAME: **Jeff Southwell**
TITLE: **President**
PHONE: **503.982.7455**
EMAIL: **jsouthwell@torzosurfaces.com**

KEY

OSHA MSDS Occupational Safety and Health Administration Material Safety Data Sheet
GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Hazard Types

AQU Aquatic toxicity
CAN Cancer
DEV Developmental toxicity
END Endocrine activity
EYE Eye irritation/corrosivity
GEN Gene mutation
GLO Global warming
MAM Mammalian/systemic/organ toxicity
MUL Multiple hazards
NEU Neurotoxicity
OZO Ozone depletion
PBT Persistent Bioaccumulative Toxic
PHY Physical Hazard (reactive)
REP Reproductive toxicity
RES Respiratory sensitization
SKI Skin sensitization/irritation/corrosivity
LAN Land Toxicity
NF Not found on Priority Hazard Lists

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 (insuficient data to benchmark)
LT-P1 List Translator Possible Benchmark 1
LT-1 List Translator Likely Benchmark 1
LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
NoGS Unknown (no data on List Translator Lists)

Recycled Types

PreC Preconsumer (Post-Industrial)
PostC Postconsumer
Both Both Preconsumer and Postconsumer
Unk Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms
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.