

CLASSIFICATION: 06 83 13 Wood, Plastics, and Composites (Framing): Resin Composite Paneling

PRODUCT DESCRIPTION: Formed with new layering and processing technology, TorZo transforms panels of 100% SFI-certified European Beech into a unique and stylish material. RayFleck is named for the small, naturally occurring wood cells which become visible only after being infused with ultra-durable acrylic resin. Available in eight colors, RayFleck is as easy to machine as its TorZo predecessors, making it suitable for furniture design, interior finishes, wall-cladding, and many other horizontal and vertical applications. 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

All Substances Above the Threshold Indicated Are:

Characterized Yes Ex/SC Yes No
% weight and role provided for all substances except SC substances characterized according to SC guidance.

Screened Yes Ex/SC Yes No
All substances screened using Priority Hazard Lists with results disclosed except SC substances screened according to SC guidance.

Identified Yes Ex/SC Yes No
One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.

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
RAYFLECK FUSION [SC:BEECH Not Screened UNDISCLOSED NoGS
WATER BM-4 UNDISCLOSED LT-P1 UNDISCLOSED BM-1 | DEL | END
SC:SPRUCE Not Screened UNDISCLOSED LT-UNK | SKI UNDISCLOSED LT-
UNK | SKI | EYE UNDISCLOSED LT-UNK UNDISCLOSED LT-UNK
UNDISCLOSED BM-2 | SKI UNDISCLOSED LT-UNK UNDISCLOSED LT-
UNK]

Number of Greenscreen BM-4/BM3 contents ... 1
Contents highest concern GreenScreen Benchmark or List translator Score ... BM-1
Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Special conditions applied: BiologicalMaterial

[LEED v4] "Yes ex/SC" result is due only to materials and substances for which Special Conditions were applied. Thus "Yes ex/SC" does not disqualify the product for the LEED v4 Materials and Resources Disclosure and Optimization credit, Option 1.

This Health Product Declaration (HPD) was completed in accordance with the HPD Standard version 2.1.1, 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. Substances not "Identified" are those considered proprietary to suppliers.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

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

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

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

PREPARER: Self-Prepared
VERIFIER:

SCREENING DATE: 2019-10-10
PUBLISHED DATE: 2019-10-10

Yes
 No

VERIFICATION #:

EXPIRY DATE: 2022-10-10



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

RAYFLECK FUSION

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: Percent by weight of substances reported as ranges due to various product thicknesses available, and due to disclosure preferences of suppliers. 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.

SC:BEECH

ID: SC:Bio

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-10-10

#: 43.70 - 69.40

GS: Not Screened

RC: None

NANO: No

ROLE: Substrate

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

Hazard Screening not performed

SUBSTANCE NOTES:

Version: SCBioMats/2018-02-23

Category: Tree-based materials

Identifier: Fagus sp.

This disclosure does not provide information on allergens, hyper-accumulation of metals, production of any toxic substances during normal metabolic activities, pesticides, and other potential hazards or sources of hazards which may be found in certain biological materials.

Phenolic Resin Glued Beech LVL.

UNDISCLOSED

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-10-10

#: 29.50 - 31.00

GS: NoGS

RC: None

NANO: No

ROLE: Acrylic Resin

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

WATER

ID: 7732-18-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-10-10**

%: **0.10 - 1.40** GS: **BM-4** RC: **None** NANO: **No** ROLE: **Solvent, Diluent**

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

SUBSTANCE NOTES: GreenScreen Benchmark® assessment score of BM-4 was provided by the HPD Builder Tool.

UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-10-10**

%: **0.10 - 0.30** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Binder Component**

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

SUBSTANCE NOTES: Phenolic Resin Glued Beech LVL. Supplier has shared substance identity under the terms of a non-disclosure agreement; substance to remain proprietary to supplier. Substance has been screened against HPD Priority Lists using the HPD Builder with results disclosed.

UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-10-10**

%: **0.05 - 0.15** GS: **BM-1** RC: **None** NANO: **No** ROLE: **Binder Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
DEVELOPMENTAL	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: Phenolic Resin Glued Beech LVL. Supplier has shared substance identity under the terms of a non-disclosure agreement; substance to remain proprietary to supplier. Substance has been screened against HPD Priority Lists using the HPD Builder with results disclosed. GreenScreen Benchmark® assessment score of BM-1 was provided by the HPD Builder Tool.

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

HAZARD SCREENING DATE: **2019-10-10**

%: **0.00 - 23.80** GS: **Not Screened** RC: **None** NANO: **No** ROLE: **Substrate**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
Hazard Screening not performed		

SUBSTANCE NOTES:

Version: SCBioMats/2018-02-23

Category: Tree-based materials

Identifier: Picea sp.

This disclosure does not provide information on allergens, hyper-accumulation of metals, production of any toxic substances during normal metabolic activities, pesticides, and other potential hazards or sources of hazards which may be found in certain biological materials.

Core of panel. Present only in Panel X product.

UNDISCLOSED

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

HAZARD SCREENING DATE: **2019-10-10**

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

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: Monomer that is held as proprietary by the manufacturer; however, all hazards are disclosed.

UNDISCLOSED

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

HAZARD SCREENING DATE: **2019-10-10**

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

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: Monomer that is held as proprietary by the manufacturer; however, all hazards are disclosed.

UNDISCLOSEDHAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-10-10**%: **Impurity/Residual** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Reaction initiator that is held as proprietary by the manufacturer; however all hazards are disclosed.

UNDISCLOSEDHAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-10-10**%: **0.00 - 0.80** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Binder Component**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Adhesive for spruce core; substance present only in Panel X products. Supplier has shared substance identity under the terms of a non-disclosure agreement; substance to remain proprietary to supplier. Substance has been screened against HPD Priority Lists using the HPD Builder with results disclosed.

UNDISCLOSEDHAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-10-10**%: **0.00 - 0.16** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Binder Component**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

SKIN IRRITATION

EU - GHS (H-Statements)

H314 - Causes severe skin burns and eye damage

SUBSTANCE NOTES: Adhesive for spruce core; substance present only in Panel X products. Identified on the US EPA Safer Chemical Ingredient List. Supplier has shared substance identity under the terms of a non-disclosure agreement; substance to remain proprietary to supplier. Substance has been screened against HPD Priority Lists using the HPD Builder with results disclosed. GreenScreen Benchmark® assessment score of BM-2 was provided by the HPD Builder Tool.

UNDISCLOSEDHAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-10-10**%: **0.00 - 0.12** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Binder Component**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Adhesive for spruce core; substance present only in Panel X products. Identified on the US EPA Safer Chemical Ingredient List. Supplier has shared substance identity under the terms of a non-disclosure agreement; substance to remain proprietary to supplier. Substance has been screened against HPD Priority Lists using the HPD Builder with results disclosed.

UNDISCLOSED

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

HAZARD SCREENING DATE: **2019-10-10**

#: **0.00 - 0.12**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Binder Component**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Adhesive for spruce core; substance present only in Panel X products. Identified on the US EPA Safer Chemical Ingredient List. Supplier has shared substance identity under the terms of a non-disclosure agreement; substance to remain proprietary to supplier. Substance has been screened against HPD Priority Lists using the HPD Builder with results 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 Standard Method V1.2 (Section 01350/CHPS) - Classroom & Office scenario

CERTIFYING PARTY: **Third Party**

ISSUE DATE: **2018-**

EXPIRY DATE:

CERTIFIER OR LAB: **Eurofins**

APPLICABLE FACILITIES: **Specialty Polymers/TorZo Surfaces, Woodburn, OR 97071**

12-06

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **Test Report No.: U811023. Item Description: Ray Fleck Fusion/Acrylic Infused Beech Wood. Conclusion: PASS. Complies with the $\leq 1/2$ CA CREL and formaldehyde maximum allowable concentration criteria. Formaldehyde emissions after 14 days (336 hours): <3 ug/m³ (Classroom); <7 ug/m³ (Office).**

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



MANUFACTURER INFORMATION

MANUFACTURER: **TorZo Surfaces**

ADDRESS: **2475 Progress Way**

Woodburn OR 97071, USA

WEBSITE: **www.TorZoSurfaces.com**

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 (insufficient 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.