

CLASSIFICATION: 09 65 00

PRODUCT DESCRIPTION: Engineered Solid Plastic Composite (ESPC) is a new innovation, providing the advantages of most current flooring material, but offering better performance in water-resistancy, rigidity, stability, and the use of environmentally friendly/green materials. This product is 100% pure vinyl and free from heavy metal, phthalates and phenol. Kingdomfloor provides 20 year manufacture warranty, and the potential product lifetime can last as long as 60 years.

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.

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
ESPC (5.5MM) [CALCIUM CARBONATE BM-3 POLYVINYL CHLORIDE (PVC) LT-P1 | RES POLYETHYLENE LT-UNK BIS(2-ETHYLHEXYL) TEREPHTHALATE BM-3 DIOCTYL TEREPHTHALATE (DOTP) NoGS METHYL METHACRYLATE, COPOLYMER WITH BUTYL ACRYLATE LT-UNK STEARIC ACID LT-P1 | END CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE LT-UNK ZINC STEARATE LT-P1 SODIUM HYDROXIDE LT-P1 | SKI | PHY GLYCERYL MONOSTEARATE LT-UNK]

Number of Greenscreen BM-4/BM3 contents ... 2
 Contents highest concern GreenScreen Benchmark or List translator Score ... LT-P1
 Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Kingdomfloor worked with a 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.

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: RFCI FloorScore
 Other: NSF-332 Sustainable Resilient Floor 2007 DRAFT trial - Platinum
 Other: Environmental Product Declaration (EPD) by SCS

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified? <input checked="" type="radio"/> Yes <input type="radio"/> No	PREPARER: ToxServices LLC VERIFIER: SCS Global Services VERIFICATION #: qGE-6372	SCREENING DATE: 2019-04-09 PUBLISHED DATE: 2019-06-28 EXPIRY DATE: 2022-04-09
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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 2.1.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-1-standard

ESPC (5.5MM)

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Kingdomfloor worked with a 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:

CALCIUM CARBONATE

ID: 471-34-1

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-04-09

#: 57.16 - 57.46

GS: BM-3

RC: None

NANO: No

ROLE: Filler Component

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This substance was properly screened by the HPD Approved Preparer.

POLYVINYL CHLORIDE (PVC)

ID: 9002-86-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-04-09

#: 25.55 - 25.55

GS: LT-P1

RC: None

NANO: No

ROLE: PVC Resin, Wear Layer and Film Component

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

RESPIRATORY

AOEC - Asthmagen

Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: This substance was properly screened by the HPD Approved Preparer.

POLYETHYLENE

ID: 9002-88-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-04-09

#: 9.49 - 9.68

GS: LT-UNK

RC: None

NANO: No

ROLE: IXPE Component

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

SUBSTANCE NOTES: This substance was properly screened by the HPD Approved Preparer.

BIS(2-ETHYLHEXYL) TEREPHTHALATE

ID: 6422-86-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-04-09		
%: 1.99 - 1.99	GS: BM-3	RC: None	NANO: No	ROLE: DOTP Component

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

SUBSTANCE NOTES: This substance was properly screened by the HPD Approved Preparer.

DIOCTYL TEREPHTHALATE (DOTP)

ID: 4654-26-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-04-09		
%: 1.81 - 1.81	GS: NoGS	RC: None	NANO: No	ROLE: PVC Wear Layer Component

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

SUBSTANCE NOTES: This substance was properly screened by the HPD Approved Preparer.

METHYL METHACRYLATE, COPOLYMER WITH BUTYL ACRYLATE

ID: 25852-37-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-04-09		
%: 0.90 - 0.90	GS: LT-UNK	RC: None	NANO: No	ROLE: Additive Component

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

SUBSTANCE NOTES: This substance was properly screened by the HPD Approved Preparer.

STEARIC ACID

ID: 57-11-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-04-09		
%: 0.89 - 0.89	GS: LT-P1	RC: None	NANO: No	ROLE: Stabilizer Component

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: This substance was properly screened by the HPD Approved Preparer.

CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE

ID: 65997-17-3

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

HAZARD SCREENING DATE: **2019-04-09**

#: **0.51 - 0.51** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Fiberglass Component**

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

SUBSTANCE NOTES: This substance was properly screened by the HPD Approved Preparer.

ZINC STEARATE

ID: 557-05-1

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

HAZARD SCREENING DATE: **2019-04-09**

#: **0.46 - 0.46** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Stabilizer Component**

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

SUBSTANCE NOTES: This substance was properly screened by the HPD Approved Preparer.

SODIUM HYDROXIDE

ID: 1310-73-2

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

HAZARD SCREENING DATE: **2019-04-09**

#: **0.12 - 0.12** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Stabilizer Component**

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: This substance was properly screened by the HPD Approved Preparer.

GLYCERYL MONOSTEARATE

ID: 123-94-4

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

HAZARD SCREENING DATE: **2019-04-09**

#: **0.10 - 0.20**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **IXPE Component**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **This substance was properly screened by the HPD Approved Preparer.**

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

RFCI FloorScore

CERTIFYING PARTY: **Third Party**

ISSUE DATE:

EXPIRY

CERTIFIER OR LAB:

APPLICABLE FACILITIES: **All Facilities**

2018-12-

DATE:

SCS Global

CERTIFICATE URL:

01

2019-11-

30

https://www.scscertified.com/products/cert_pdfs/ZhejiangKingdom_2018_SCS-FS-03218_s2.pdf

CERTIFICATION AND COMPLIANCE NOTES: **Registration # SCS-FS-03218; Conforms to the CDPH/EHLB Standard Method v1.2-2017 (California Section 01350), effective April 1, 2017, for the school classroom and private office parameters when modeled as Flooring.**

OTHER

NSF-332 Sustainable Resilient Floor 2007 DRAFT trial - Platinum

CERTIFYING PARTY: **Third Party**

ISSUE

EXPIRY

CERTIFIER OR

APPLICABLE FACILITIES: **All Facilities**

DATE:

DATE:

LAB: **SCS**

CERTIFICATE URL:

2018-

2021-

Global

https://www.scscertified.com/products/cert_pdfs/ZhejiangKingdomPlastics_2018_SCS-RF-05179_s.pdf

11-19

11-30

CERTIFICATION AND COMPLIANCE NOTES: **Registration # SCS-RF-05179; Conforms to the NSF/ANSI 332-2015 Sustainability Assessment for Resilient Floor Coverings**

OTHER

Environmental Product Declaration (EPD) by SCS

CERTIFYING PARTY: **Third Party**

ISSUE DATE: **2018-**

EXPIRY DATE: **2023-**

CERTIFIER OR LAB: **SCS**

APPLICABLE FACILITIES: **All Facilities**

07-16

07-15

Global

CERTIFICATE URL:

https://www.scscertified.com/products/cert_pdfs/SCS-EPD-05047_KingdomFloor_071618.pdf

CERTIFICATION AND COMPLIANCE NOTES: **SCS-EPD-05047; Product Category Rule (PCR) for preparing an Environmental Product Declaration (EPD) for Flooring: Carpet, Resilient, Laminate, Ceramic, Wood. NSF International. Version 2. 2014.**

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

Use of Special Condition - No CAS# Available: The Kingdomfloor models, which are covered under this current HPD, contain an additive chemical in which a CAS# was not able to be determined for. The component "PVC Wear Layer" contains an additive ingredient identified by the manufacturer as an "Environmental Stabilizer" that is present in the final product formulation at a maximum of 0.16% (1,600 ppm). The HPDC Approved Preparer worked with the supplier of the PVC Wear Layer and it was determined that a CAS# is not available for the environmental stabilizer additive. Therefore, the HPDC Approved Preparer has concluded that the Safety Data Sheet (SDS) published on March 13, 2015 for the PVC Wear Layer, that contains the environmental stabilizer ingredient, is compliant with the Commission Regulation (EU) No 2015/830 (EU CLP) and that no GHS Category 1 hazards are disclosed on the SDS, therefore, no HPD target hazards would be flagged for this ingredient.



MANUFACTURER INFORMATION

MANUFACTURER: **Kingdomfloor**
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Heshan Town, Tongxiang City, Jiangxing City
Zhejiang Province 314512, China
 WEBSITE: **www.kingdomflooring.com.cn**

CONTACT NAME: **Customer Support**
 TITLE: **Customer Support**
 PHONE: **+86-573-89383298**
 EMAIL: **Sales@kingdomflooring.com.cn**

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

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-P1 List Translator Possible Benchmark 1
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator Likely Benchmark 1
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS Unknown (no data on List Translator Lists)
BM-U Benchmark Unspecified (insufficient data to benchmark)	

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.