

HPD UNIQUE IDENTIFIER: 24148

CLASSIFICATION: 09 67 23 Resinous Flooring

PRODUCT DESCRIPTION: Flowcrete Peran STC is a 100% solids, low viscosity, crystal clear epoxy resin binder and sealer that provides improved clarity and increased UV stability as compared to conventional epoxy coatings.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold level	Residuals/Impurities	<i>All Substances Above the Threshold Indicated Are:</i>
<input type="radio"/> Nested Materials Method	<input type="radio"/> 100 ppm	<input checked="" type="radio"/> Considered	Characterized <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No
<input checked="" type="radio"/> Basic Method	<input checked="" type="radio"/> 1,000 ppm	<input type="radio"/> Partially Considered	<i>% weight and role provided for all substances.</i>
Threshold Disclosed Per	<input type="radio"/> Per GHS SDS	<input type="radio"/> Not Considered	Screened <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No
<input type="radio"/> Material	<input type="radio"/> Other	Explanation(s) provided for Residuals/Impurities?	<i>All substances screened using Priority Hazard Lists with results disclosed.</i>
<input checked="" type="radio"/> Product		<input checked="" type="radio"/> Yes <input type="radio"/> No	Identified <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No
			<i>All substances disclosed by Name (Specific or Generic) and Identifier.</i>

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

FLOWCRETE PERAN STC [BISPHENOL A EPICHLOROHYDRIN POLYMER LT-P1 | SKI | EYE | AQU | MUL DIAMINOPOLYPROPYLENE GLYCOL LT-P1 | MUL 4-NONYLPHENOL (BRANCHED) LT-1 | AQU | END | MUL | REP | DEV | SKI | PBT BENZYL ALCOHOL BM-2 ALKYL (C12, C14) GLYCIDYL ETHER LT-P1 | SKI | MUL CASHEW NUT OIL LT-P1 | MUL 1,4-BIS(AMINOCYCLOHEXYL)METHANE LT-P1 | MUL N-(2-AMINOETHYL)PIPERAZINE LT-P1 | SKI | MUL TRIMETHYLOLPROPANE TRIACRYLATE LT-P1 | SKI | CAN | EYE | RES | MUL C13-14 ISOPARAFFIN BM-2 | CAN | MAM DIISOBUTYL KETONE LT-UNK AROMATIC NAPHTHA, TYPE 1, SHOWN TO CONTAIN LESS THAN 0,1 % W/W BENZENE LT-P1 | END | MUL | MAM | CAN | GEN TOLUENE BM-1 | END | SKI | DEV | MUL | MAM | REP | PHY]

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

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

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

This HPD was generated with basic inventory information.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): < 20 g/l, compliant to low VOC Rule 1113 in all 50 states
Regulatory (g/l): < 20 g/l, compliant to low VOC Rule 1113 in all 50 states

Does the product contain exempt VOCs: No
Are ultra-low VOC tints available: N/A

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

VOC emissions: CDPH Standard Method V1.2 (Section 01350/CHPS) - Classroom & Office scenario
VOC content: EPA Method 24 - Volatile Matter Content (EPA 24)

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: 2021-03-19

PUBLISHED DATE: 2021-03-19

EXPIRY DATE: 2024-03-19

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

FLOWCRETE PERAN STC

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: The product is estimated to have no residuals/impurities over 1000 ppm based on raw material supplier information.

OTHER PRODUCT NOTES:

BISPHENOL A EPICHLOROHYDRIN POLYMER

ID: 25068-38-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-03-19

#: 51.5400 - 68.7100 GS: LT-P1 RC: None NANO: No SUBSTANCE ROLE: Binder

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKI	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
AQU	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKI	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction

SUBSTANCE NOTES:

DIAMINOPOLYPROPYLENE GLYCOL

ID: 9046-10-0

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-03-19

#: 7.8300 - 15.6500 GS: LT-P1 RC: None NANO: No SUBSTANCE ROLE: Curing agent

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

SUBSTANCE NOTES:

4-NONYLPHENOL (BRANCHED)

ID: 84852-15-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-03-19

#: 7.8300 - 15.6500 GS: LT-1 RC: None NANO: No SUBSTANCE ROLE: Plasticizer

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
AQU	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
AQU	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
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
END	ChemSec - SIN List	Endocrine Disruption
REP	US EPA - PPT Chemical Action Plans	Reproductive effects
AQU	US EPA - PPT Chemical Action Plans	Highly toxic to aquatic organisms
DEV	US EPA - PPT Chemical Action Plans	Developmental Effects
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
SKI	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
REP	EU - GHS (H-Statements)	H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Substance of Possible Concern
PBT	ChemSec - SIN List	PBT / vPvB (Persistent, Bioaccumulative, & Toxic / very Persistent & very Bioaccumulative)
END	EU - SVHC Authorisation List	Equivalent Concern - Candidate List

SUBSTANCE NOTES:

BENZYL ALCOHOL

ID: 100-51-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2021-03-19			
%: 3.1300 - 7.8300	GS: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Plasticizer
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		

SUBSTANCE NOTES:

ALKYL (C12, C14) GLYCIDYL ETHER

ID: 68609-97-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2021-03-19			
%: 1.7200 - 6.8800	GS: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Diluent

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKI	EU - GHS (H-Statements)	H315 - Causes skin irritation
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKI	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction

SUBSTANCE NOTES:

CASHEW NUT OIL

ID: 8007-24-7

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2021-03-19		
%: 1.7200 - 6.8800	GS: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Diluent
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters		

SUBSTANCE NOTES:

1,4-BIS(AMINOCYCLOHEXYL)METHANE

ID: 1761-71-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2021-03-19		
%: 0.7900 - 3.1300	GS: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Curing agent
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters		

SUBSTANCE NOTES:

N-(2-AMINOETHYL)PIPERAZINE

ID: 140-31-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2021-03-19		
%: 0.7900 - 3.1300	GS: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Curing agent
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
SKI	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage		
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters		
SKI	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction		

SUBSTANCE NOTES:

TRIMETHYLOLPROPANE TRIACRYLATE

ID: 15625-89-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2021-03-19		
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#: 0.6900 - 1.7200

GS: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Diluent

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
CAN	IARC	Group 2b - Possibly carcinogenic to humans
SKI	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKI	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction

SUBSTANCE NOTES:

C13-14 ISOPARAFFIN

ID: 64742-47-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-03-19**

#: 0.0690 - 0.6900

GS: BM-2

RC: None

NANO: No

SUBSTANCE ROLE: Plasticizer

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
MAM	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways

SUBSTANCE NOTES:

DIISOBUTYL KETONE

ID: 108-83-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-03-19**

#: 0.0690 - 0.6900

GS: LT-UNK

RC: None

NANO: No

SUBSTANCE ROLE: Solvent

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

SUBSTANCE NOTES:

AROMATIC NAPHTHA, TYPE 1, SHOWN TO CONTAIN LESS THAN 0,1 % W/W BENZENE

ID: 64742-95-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-03-19**

#: 0.0320 - 0.3200

GS: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Solvent

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
MAM	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
CAN	GHS - Australia	H350 - May cause cancer
GEN	GHS - Australia	H340 - May cause genetic defects

SUBSTANCE NOTES:

TOLUENE

ID: 108-88-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-03-19**

#: 0.0007 - 0.0690

GS: **BM-1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Solvent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKI	EU - GHS (H-Statements)	H315 - Causes skin irritation
DEV	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant
DEV	CA EPA - Prop 65	Developmental toxicity
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
DEV	EU - GHS (H-Statements)	H361d - Suspected of damaging the unborn child
MAM	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
REP	CA EPA - Prop 65	Reproductive Toxicity - Female
REP	GHS - Japan	Toxic to reproduction - Category 1A [H360]
PHY	EU - GHS (H-Statements)	H225 - Highly flammable liquid and vapour

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

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

CERTIFYING PARTY: Self-declared

ISSUE DATE: 2020-08-

EXPIRY DATE:

CERTIFIER OR LAB: Key Resin Lab

APPLICABLE FACILITIES: ALL

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CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: Small Environment Chamber VOC Emissions Test, ASTM D5116

VOC CONTENT

EPA Method 24 - Volatile Matter Content (EPA 24)

CERTIFYING PARTY: Self-declared

ISSUE DATE: 2020-07-

EXPIRY DATE:

CERTIFIER OR LAB: Key Resin Lab

APPLICABLE FACILITIES: ALL

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CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: EPA Method 24 - Volatile Organic Compound (VOC) Content, per ASTM D 2369

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

The product is estimated to have no residuals / impurities over 1000 ppm based on raw material supplier information.

MANUFACTURER INFORMATION

MANUFACTURER: Key Resin Company
ADDRESS: 4050 Clough Woods Drive
 Batavia OHIO 45103, United States
WEBSITE: www.keyresin.com

CONTACT NAME: Travis Barkey
TITLE: Technical Director
PHONE: 15139434225
EMAIL: tbarkey@keyresin.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	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.