KEY #445 URETHANE SEALER
by Key Resin Company

Health Product Declaration v2.3

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 772777239552
CLASSIFICATION: 09 67 23 Resinous Flooring
PRODUCT DESCRIPTION: KEY #445 is a two component water based aliphatic (non-yellowing) polyurethane with a matte finish. KEY #445 is free of the health and environmental problems normally found in solvent-based urethanes, while maintaining excellent performance properties. KEY #445 has good chemical, stain, and mar resistance. In addition, it's easy to clean and has excellent color retention under heavy foot traffic. KEY #445 is a high performance coating for use in a variety of seamless floor and wall coating systems. KEY #445 can be used as a seal coat for a variety of Key Resin Systems.

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
- ○ Other

Residuals/Impurities Evaluation
- ◉ Completed
- ○ Partially Completed
- ○ Not Completed

Explanation(s) provided :
- ◉ Yes ○ No

For all contents above the threshold, the manufacturer has:

Characterized ◉ **Yes** ○ **No**
Provided weight and role.

Screened ○ **Yes** ◉ **No**
Provided screening results using HPDC-approved methods.

Identified ○ **Yes** ◉ **No**
Provided name and CAS RN or other 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.

PRODUCT | **MATERIAL OR SUBSTANCE** | *RESIDUAL OR IMPURITY* GREENSCREEN SCORE | HAZARD TYPE

KEY #445 URETHANE SEALER [WATER BM-4 **AQUEOUS POLYACRYLIC RESIN** Not Screened **HEXANE, 1,6-DIISOCYANATO-, HOMOPOLYMER** LT-P1 | SKI **CYCLOHEXANAMINE, N,N-DIMETHYL-, COMPDS. WITH 3-(CYCLOHEXYLAMINO)-1-PROPANESULFONIC ACID-BLOCKED 1,6-DIISOCYANATOHEXANE HOMOPOLYMER** LT-UNK **ETHYLENE GLYCOL MONOPROPYL ETHER** LT-UNK | EYE | MAM **N,N-DIMETHYLCYCLOHEXYLAMINE** LT-P1 | MUL | MAM | EYE | SKI | AQU **]**

Number of Greenscreen BM-4/BM3 contents ... 1

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

This HPD was generated with basic inventory information.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): < 100, compliant to low VOC Rule 1113 in all 50 states

Regulatory (g/l): < 100, compliant to low VOC Rule 1113 in all 50 states

Does the product contain exempt VOCs: No

Are colorants available that do not increase the VOC content of the base paint when tinted: 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

No pre-checks completed or disclosed.

Third Party Verified?
- ○ Yes
- ◉ No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2024-06-11
PUBLISHED DATE: 2024-06-11
EXPIRY DATE: 2027-06-11

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 2.3, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-3-standard

KEY #445 URETHANE SEALER

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: 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:

WATER ID: 7732-18-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-06-11 7:17:48**

%: **43.0000 - 50.8200** GreenScreen: **BM-4** RC: **None** NANO: **No** SUBSTANCE ROLE: **Solvent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex IV listing due to intrinsic safety

SUBSTANCE NOTES:

AQUEOUS POLYACRYLIC RESIN ID: Not Registered

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **Not Screened**

%: **31.2800 - 43.0000** GreenScreen: **Not Screened** RC: **None** NANO: **No** SUBSTANCE ROLE: **Binder**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
	Hazard Screening not performed	

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
	Additional Hazard Screening not performed	

SUBSTANCE NOTES:

HEXANE, 1,6-DIISOCYANATO-, HOMOPOLYMER ID: 28182-81-2

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-06-11 7:17:49**

%: **13.0900 - 21.8200** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Curing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	GHS - New Zealand	Skin sensitisation category 1

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

CYCLOHEXANAMINE, N,N-DIMETHYL-, COMPDS. WITH 3-(CYCLOHEXYLAMINO)-1-PROPANESULFONIC ACID-BLOCKED 1,6-DIISOCYANATOHEXANE HOMOPOLYMER

ID: **666723-27-9**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-06-11 7:17:49**

%: **3.2800 - 5.4600** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Curing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

ETHYLENE GLYCOL MONOPROPYL ETHER

ID: **2807-30-9**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-06-11 7:17:49**

%: **0.0800 - 3.9100** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Surfactant**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
EYE	GHS - New Zealand	Eye irritation category 2
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
MAM	GHS - Japan	H331 - Toxic if inhaled [Acute toxicity (inhalation: vapor) - Category 3]
MAM	GHS - Japan	H311 - Toxic in contact with skin [Acute Toxicity (dermal) - Category 3]
MAM	GHS - New Zealand	Acute dermal toxicity category 3
EYE	GHS - Japan	H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Some Solvents

SUBSTANCE NOTES:

N,N-DIMETHYLCYCLOHEXYLAMINE ID: **98-94-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-06-11 7:17:49**

%: **0.0300 - 0.2200** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Accelerator**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
EYE	GHS - New Zealand	Serious eye damage category 1
EYE	GHS - Japan	H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]
SKI	GHS - Japan	H314 - Causes severe skin burns and eye damage [Skin corrosion / irritation - Category 1]
SKI	GHS - New Zealand	Skin corrosion category 1B
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]
AQU	GHS - Japan	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
MAM	GHS - Japan	H311 - Toxic in contact with skin [Acute Toxicity (dermal) - Category 3]
MAM	GHS - Japan	H301 - Toxic if swallowed [Acute Toxicity (oral) - Category 3]
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: vapor) - Category 2]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

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
APPLICABLE FACILITIES: All
CERTIFICATE URL:

ISSUE DATE: 2021-02-01 00:00:00
EXPIRY DATE:

CERTIFIER OR LAB: Key Resin

CERTIFICATION AND COMPLIANCE NOTES: CDPH - CA Section 01350 Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers Version 1.2.

VOC CONTENT — **EPA Method 24 - Volatile Matter Content (EPA 24)**

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: All
CERTIFICATE URL:

ISSUE DATE: 2018-06-30 00:00:00
EXPIRY DATE:

CERTIFIER OR LAB: Key Resin Lab

CERTIFICATION AND COMPLIANCE NOTES: EPA 24 VOC Content Components of Waterborne Material

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.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Key Resin Company**
ADDRESS: **4050 Clough Woods Drive**
Batavia, Ohio 45103
COUNTRY: **USA**

WEBSITE: **www.keyresin.com**
CONTACT NAME: **Travis Barkey**
TITLE: **Technical Director**
PHONE: **5139434225**
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
CAN Cancer
DEV Developmental toxicity
END Endocrine activity
EYE Eye irritation/corrosivity
GEN Gene mutation
GLO Global warming
LAN Land toxicity
MAM Mammalian/systemic/organ toxicity
MUL Multiple
NEU Neurotoxicity
NF Not found on Priority Hazard Lists
OZO Ozone depletion
PBT Persistent, bioaccumulative, and toxic
PHY Physical hazard (flammable or reactive)
REP Reproductive
RES Respiratory sensitization
SKI Skin sensitization/irritation/corrosivity
UNK Unknown

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 (due to insufficient data)
LT-P1 List Translator Possible 1 (Possible Benchmark-1)
LT-1 List Translator 1 (Likely Benchmark-1)
LT-UNK List Translator Benchmark Unknown
NoGS No GreenScreen.

GreenScreen Benchmark scores sometimes also carry subscripts, which provide more context for how the score was determined. These are DG (data gap), TP (transformation product), and CoHC (chemical of high concern). For more information, see 2.2.2.4 GreenScreen® for Safer Chemicals, www.greenscreenchemicals.org, and Best Practices for Hazard Screening on the HPDC website (hpd-collaborative.org).

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.