KAUFMAN

Thinfilm 447

Health Product Declaration v2.3
CLASSIFICATION: 03 30 00 Cast-in-Place Concrete
HPD UNIQUE IDENTIFIER: 54045499392

Product Description

Thinfilm 447 is a water-based, pigmented concrete curing compound specially designed for both highways and commercial construction. These curing compounds form a thin membrane when sprayed or brushed on freshly finished concrete surfaces.

Section 1: Summary

Nested 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 in 4 of 4 Materials

Explanation(s) provided for Residuals/Impurities?

(•) 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.

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

SOLVENT [WATER BM-4] FILM FORMER [SLACK WAX (PETROLEUM) LT-1 | CAN | MUL | DEV] PIGMENT [TITANIUM DIOXIDE LT-1 | CAN | END | MAM] SURFACTANT [STEARIC ACID LT-P1 | END]

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

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

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

This HPD was produced using primary information from the manufacturer, including CAS numbers and SDS when needed. The manufacturer has made every effort to report the substances in this product to the listed threshold. This is a voluntary, self-reported effort. Any errors or omissions shall be considered a human error and therefore reported to the manufacturer. The manufacturer shall not be liable for omissions.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): <5 Regulatory (g/l): 100
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 - Not tested
VOC content: MAS Certified Green - VOC Content

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?
( ) Yes
(•) No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2023-07-12
PUBLISHED DATE: 2023-12-15
EXPIRY DATE: 2026-07-12

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

SOLVENT **%: 70.0000 - 75.0000**

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Other: Water

RESIDUALS AND IMPURITIES NOTES: Impurities listed above the threshold by Quartz or Pharos databases are noted in this HPD. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 “The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD.” This includes average data declared in the common product database or peer-reviewed scientific articles. For this product, no actual material has been tested. Therefore, residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. Any R/I above the threshold shall be listed on the HPD; otherwise, if none are listed, then no residuals or impurities are common in that substance above the threshold.

OTHER MATERIAL NOTES: No residual or impurities are registered for this substance -Per the Pharos database.

WATER ID: 7732-18-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-07-12 15:11:15**

%: **100.0000** GreenScreen: **BM-4** RC: **None** NANO: **No** SUBSTANCE ROLE: **Diluent**

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:

FILM FORMER **%: 18.0000 - 25.0000**

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Impurities listed above the threshold by Quartz or Pharos databases are noted in this HPD. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 “The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD.” This includes average data declared in the common product database or peer-reviewed scientific articles. For this product, no actual material has been tested. Therefore, residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. Any R/I above the threshold shall be listed on the HPD; otherwise, if none are listed, then no residuals or impurities are common in that substance above the threshold.

OTHER MATERIAL NOTES: Percentages are shown in a range to protect the actual formulation.

SLACK WAX (PETROLEUM)

ID: 64742-61-6

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-07-12 15:11:16**

%: **100.0000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Film former**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CAN	GHS - Australia	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
DEV	GHS - Australia	H361d - Suspected of damaging the unborn child [Reproductive toxicity - Category 2]
CAN	EU - REACH Annex XVII CMRs	Carcinogens: Category 1B

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products

SUBSTANCE NOTES: Slack wax, a complex combination of hydrocarbons obtained from a petroleum fraction by solvent crystallization (solvent dewaxing) or as a distillation fraction from a very waxy crude.

PIGMENT

%: **2.0000 - 5.0000**

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Geologically Derived Material

RESIDUALS AND IMPURITIES NOTES: Impurities listed above the threshold by Quartz or Pharos databases are noted in this HPD. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 “The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD.” This includes average data declared in the common product database or peer-reviewed scientific articles. For this product, no actual material has been tested. Therefore, residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. Any R/I above the threshold shall be listed on the HPD; otherwise, if none are listed, then no residuals or impurities are common in that substance above the threshold.

OTHER MATERIAL NOTES: Percentages are shown in a range to protect the actual formulation.

TITANIUM DIOXIDE

ID: **13463-67-7**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-07-12 15:11:16**

%: **99.0000** GreenScreen: **LT-1** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
CAN	IARC	Group 2b - Possibly carcinogenic to humans
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE Safer Chemicals Ingredients list (SCIL) Colorants - Green Circle (Verified Low Concern)

SUBSTANCE NOTES: Percentages >10% are used to disguise formulas covered as intellectual property.

SURFACTANT

%: **1.0000 - 3.0000**

PRODUCT THRESHOLD: **100 ppm** RESIDUALS AND IMPURITIES EVALUATION COMPLETED: **Yes** MATERIAL TYPE: **Polymeric Material**

RESIDUALS AND IMPURITIES NOTES: Impurities listed above the threshold by Quartz or Pharos databases are noted in this HPD. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 “The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD.” This includes average data declared in the common product database or peer-reviewed scientific articles. For this product, no actual material has been tested. Therefore, residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. Any R/I above the threshold shall be listed on the HPD; otherwise, if none are listed, then no residuals or impurities are common in that substance above the threshold.

OTHER MATERIAL NOTES: Percentages are shown in a range to protect the actual formulation.

STEARIC ACID ID: **57-11-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-07-12 15:11:17**

%: **100.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Surfactant**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

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

SUBSTANCE NOTES: No residuals or impurities at or above 100 ppm.

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 - Not tested**

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: This is not a facility based declaration.
CERTIFICATE URL:

ISSUE DATE: 2023-07-15
EXPIRY DATE:

CERTIFIER OR LAB: None

CERTIFICATION AND COMPLIANCE NOTES:

VOC CONTENT — **MAS Certified Green - VOC Content**

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: This is not a facility based certification.
CERTIFICATE URL:

ISSUE DATE: 2023-07-15
EXPIRY DATE:

CERTIFIER OR LAB: Kaufman Products

CERTIFICATION AND COMPLIANCE NOTES: This is not a MAS Green Certified. As per SDS VOC content < 5 grams/liter.

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

Kaufman Products now further develops these products by emulsifying them into a low VOC formula for a safer atmosphere. Thinfilms contain pure titanium dioxide pigment to reflect the heat of the sun. Due to the unique emulsification process, Kaufman Products white-pigmented cures do not settle and hard pack. Instead, they softly layer for easy re-mixing with air hoses.

Specifications:
Thinfilm 447: Wax Based
ASTM C-309, Type II, Class A
AASHTO M-148, Type II, Class A

Packaging:
5 gallon pail
55 gallon drum
275 gallon tote

Precautions:
Wax based curing compounds are ruined if allowed to freeze or are handled by highspeed pumps or agitators.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Kaufman Products, Inc.**
ADDRESS: **3811 Curtis Avenue**
Baltimore, Maryland 21226
COUNTRY: **United States**

WEBSITE: **www.kaufmanproducts.net**
CONTACT NAME: **Alex Kaufman**
TITLE: **President**
PHONE: **4103548600**
EMAIL: **akaufman@kaufmanproducts.net**

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.