



Product Description

Thinfilm 446 VA, is a water & wax based, pigmented concrete curing compound, specially designed for both highways and commercial construction. Thinfilm compounds are specially formulated to meet specific state highway Compliances.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold Level	Residuals/Impurities Evaluation	For all contents above the threshold, the manufacturer has:
<input checked="" type="radio"/> Nested Materials Method	<input checked="" type="radio"/> 100 ppm	Completed in 5 of 5 Materials	<b>Characterized</b> <input checked="" type="radio"/> Yes <input type="radio"/> No
<input type="radio"/> Basic Method	<input type="radio"/> 1,000 ppm	<b>Explanation(s) provided for Residuals/Impurities?</b>	<i>Provided weight and role.</i>
<b>Threshold Disclosed Per</b>	<input type="radio"/> Per GHS SDS	<input checked="" type="radio"/> Yes <input type="radio"/> No	<b>Screened</b> <input checked="" type="radio"/> Yes <input type="radio"/> No
<input type="radio"/> Material	<input type="radio"/> Other		<i>Provided screening results using HPDC-approved methods.</i>
<input checked="" type="radio"/> Product			<b>Identified</b> <input checked="" type="radio"/> Yes <input type="radio"/> No
			<i>Provided name and CAS RN or other 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.

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 ] FILLER [ BARIUM SULFATE BM-2 ] CAN | MAM MICA LT-UNK ] MAM ] SURFACTANT [ STEARIC ACID LT-P1 ] END ] PIGMENT [ TITANIUM DIOXIDE LT-1 ] CAN | END | MAM ]

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? <input type="radio"/> Yes <input checked="" type="radio"/> No	PREPARER: Self-Prepared VERIFIER: VERIFICATION #:	SCREENING DATE: 2023-07-12 PUBLISHED DATE: 2023-12-15 EXPIRY DATE: 2026-07-12
---	---	---

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](http://www.hpd-collaborative.org/hpd-2-3-standard)

SOLVENT	%: 60.0000 - 70.0000	
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.

WATERID: 7732-18-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2023-07-12 14:18:23	
%: 100.0000	GreenScreen: BM-4	RC: UNK	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: This substance appeared on US EPA Safer Chemical Ingredient list.

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.

SLACK WAX (PETROLEUM)			ID: 64742-61-6	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-07-12 14:18:23		
%: 100.0000	GreenScreen: LT-1	RC: UNK	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: No residuals or impurities are expected to be present at or above 100 ppm.				

FILLER	%: 5.0000 - 10.0000	
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.		

HAZARD DATA SOURCE:  Pharos Chemical and Materials Library			HAZARD SCREENING DATE:  2023-07-14 18:10:15	
%: 79.4800	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Filler
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
CAN	MAK		Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels	
MAM	GHS - Japan		H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)		C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022	
			Biological and Environmentally Released Materials	
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)		C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022	
			Children's Products	
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)		C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022	
			Cosmetics & Personal Care Products	
SUBSTANCE NOTES: Barium sulfate is an inorganic compound with the chemical formula BaSO43. Barium sulfate occurs in nature as the mineral barite.				

HAZARD DATA SOURCE:  Pharos Chemical and Materials Library			HAZARD SCREENING DATE:  2023-07-14 18:10:45	
%: 20.5200	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Filler
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
MAM	GHS - Japan		H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	
SUBSTANCE NOTES: "Certain varieties contain traces of iron, titanium, lithium, sodium and fluorine."International Labour Office. Encyclopedia of Occupational Health and Safety. Vols. I&II. Geneva, Switzerland: International Labour Office, 1983., p. 1358 [PubChem]				

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.” Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities.

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

STEARIC ACID

ID: 57-11-4

HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b>			HAZARD SCREENING DATE: <b>2023-07-12 14:18:25</b>	
%: <b>100.0000</b>	GreenScreen: <b>LT-P1</b>	RC: <b>None</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Surfactant</b>
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.				

PIGMENT

%: 1.0000 - 3.0000

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 14:18:24	
%: 99.0000	GreenScreen: LT-1	RC: UNK	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 (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	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.

### 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	ISSUE DATE: 2023-07-15	CERTIFIER OR LAB: None
APPLICABLE FACILITIES: This is not a facility based.	EXPIRY DATE:	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES: The Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions From Indoor Sources, is one of the most widely used standards to evaluate building and interior products for low chemical emissions.		

VOC CONTENT		MAS Certified Green - VOC Content
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2023-07-15	CERTIFIER OR LAB: Kaufman
APPLICABLE FACILITIES: This is not facility based certification or declaration.	EXPIRY DATE:	Products
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES: 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

Uses:  
All Thinfilm products may be used on curbs and gutters, sidewalks, driveways, bridge decks, super structures, and runways. Thinfilm compounds are specially formulated to meet specific state highway specifications.

Specifications:  
ASTM C-309, Type II, Class A  
AASHTO M-148, Type II, Class A  
Corps of Eng. CRD C-300 & VDOT

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. They should only be handled by using a type of diaphragm air pump or a positive displacement pump with 500 rpm or less.

## MANUFACTURER INFORMATION

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

**WEBSITE:** [www.kaufmanproducts.net](http://www.kaufmanproducts.net)  
**CONTACT NAME:** Alex Kaufman  
**TITLE:** President  
**PHONE:** 4103548600  
**EMAIL:** [akaufman@kaufmanproducts.net](mailto: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

<b>AQU</b> Aquatic toxicity	<b>LAN</b> Land toxicity	<b>PHY</b> Physical hazard (flammable or reactive)
<b>CAN</b> Cancer	<b>MAM</b> Mammalian/systemic/organ toxicity	<b>REP</b> Reproductive
<b>DEV</b> Developmental toxicity	<b>MUL</b> Multiple	<b>RES</b> Respiratory sensitization
<b>END</b> Endocrine activity	<b>NEU</b> Neurotoxicity	<b>SKI</b> Skin sensitization/irritation/corrosivity
<b>EYE</b> Eye irritation/corrosivity	<b>NF</b> Not found on Priority Hazard Lists	<b>UNK</b> Unknown
<b>GEN</b> Gene mutation	<b>OZO</b> Ozone depletion	
<b>GLO</b> Global warming	<b>PBT</b> Persistent, bioaccumulative, and toxic	

### GreenScreen (GS)

<b>BM-4</b> Benchmark 4 (prefer-safer chemical)	<b>LT-P1</b> List Translator Possible 1 (Possible Benchmark-1)
<b>BM-3</b> Benchmark 3 (use but still opportunity for improvement)	<b>LT-1</b> List Translator 1 (Likely Benchmark-1)
<b>BM-2</b> Benchmark 2 (use but search for safer substitutes)	<b>LT-UNK</b> List Translator Benchmark Unknown
<b>BM-1</b> Benchmark 1 (avoid - chemical of high concern)	<b>NoGS</b> No GreenScreen.
<b>BM-U</b> Benchmark Unspecified (due to insufficient data)	

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](http://www.greenscreenchemicals.org), and Best Practices for Hazard Screening on the HPDC website ([hpd-collaborative.org](http://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*



