

HPD UNIQUE IDENTIFIER: 166639518720

CLASSIFICATION: 07 51 13 Built-Up Asphalt Roofing

PRODUCT DESCRIPTION: For design teams selecting environmentally responsible roofing materials, Siplast offers the innovative Paradiene 30 FR TG BW Roof Membrane. Paradiene 30 FR TG BW is a high performance, modified bitumen finish ply designed for use in homogeneous multilayer modified bitumen roof membrane systems. Paradiene 30 FR TG BW is intended to be used as a highly reflective, cool roof membrane to meet the energy requirements of government agencies, and state and local building codes.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold Level	Residuals/Impurities Evaluation	<i>For all contents above the threshold, the manufacturer has:</i> Characterized ☒ Yes ☐ No <i>Provided weight and role.</i> Screened ☒ Yes ☐ No <i>Provided screening results using HPDC-approved methods.</i> Identified ☒ Yes ☐ No <i>Provided name and CAS RN or other identifier.</i>
☒ Nested Materials Method	☐ 100 ppm	☐ Completed	
☐ Basic Method	☒ 1,000 ppm	☒ Not Completed	
Threshold Disclosed Per	☐ Per GHS SDS	Explanation(s) provided for Residuals/Impurities?	
☐ Material	☐ Other	☒ Yes ☐ No	
☒ Product			

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

PARADIENE 30 FR TG BW [ASPHALT (PRIMARY CASRN IS 8052-42-4) LT-1] CAN | MAM | GEN KAOLIN (PRIMARY CASRN IS 1332-58-7) LT-UNK] CAN CALCIUM BORATE (PRIMARY CASRN IS 12007-56-6) LT-P1] REP LIMESTONE BM-3dg STYRENE BUTADIENE RUBBER (BENZENE, ETHENYL-, POLYMER WITH 1,3-BUTADIENE) LT-UNK HYDROCARBON OILS, PROCESS BLENDS NoGS CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE LT-UNK POLYETHYLENE LT-UNK SILICA, CHRISTOBALITE - RESPIRABLE LT-1] CAN | MAM | GEN]

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:

No residuals or impurities are expected to be present in the product at or above the reporting 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: N/A

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.

Pre-checked for LEED v4.1 Option 1.

Third Party Verified?	PREPARER: Self-Prepared	SCREENING DATE: 2024-04-09
☐ Yes	VERIFIER:	PUBLISHED DATE: 2024-04-09
☒ No	VERIFICATION #:	EXPIRY DATE: 2027-04-09

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

PARADIENE 30 FR TG BW		%: 100.0000
PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No	MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities have not been considered for this product		
OTHER MATERIAL NOTES: SBS modified bitumen asphalt roofing membrane.		

ASPHALT (PRIMARY CASRN IS 8052-42-4)

ID: 1955522-49-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-04-09 7:11:51		
%: 40.0000 - 44.0000	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Structure component	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
CAN	US CDC - Occupational Carcinogens		Occupational Carcinogen		
CAN	MAK		Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification		
CAN	IARC		Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources		
MAM	GHS - Japan		H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]		
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]		
GEN	GHS - Japan		H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION		
None found			No listings found on Additional Hazard Lists		
SUBSTANCE NOTES: The material used as the primary component in this roofing and waterproofing membrane.					

KAOLIN (PRIMARY CASRN IS 1332-58-7)

ID: 862272-04-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-04-09 7:11:51		
%: 25.0000 - 29.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Heat or UV stabilizer	

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES: Mineral base for reflective granules.		

CALCIUM BORATE (PRIMARY CASRN IS 12007-56-6)

ID: 167077-83-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-04-09 7:11:51		
%: 10.0000 - 14.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Flame retardant
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
REP	GHS - Australia		H360FD - May damage fertility. May damage the unborn child [Reproductive toxicity - Category 1A or 1B]	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	
SUBSTANCE NOTES: The material used as the flame retardant component in this FR product.				

LIMESTONE

ID: 1317-65-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-04-09 7:11:52		
%: 8.0000 - 12.0000	GreenScreen: BM-3dg	RC: None	NANO: No	SUBSTANCE ROLE: Stabilizer
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: The material used as a mineral stabilizing component in this roofing and waterproofing membrane.				

STYRENE BUTADIENE RUBBER (BENZENE, ETHENYL-, POLYMER WITH 1,3-BUTADIENE)

ID: 9003-55-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-04-09 7:11:52		
?: 4.0000 - 8.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Viscosity modifier

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: The material used as the asphalt modifying component in this roofing and waterproofing membrane.		

HYDROCARBON OILS, PROCESS BLENDS

ID: 68131-05-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-04-09 7:11:52	
%: 0.0000 - 4.0000	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Viscosity modifier
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: The material used as the viscosity reducing component in this roofing and waterproofing membrane.				

CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE

ID: 65997-17-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-04-09 7:11:52		
%: 0.5000 - 1.5000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
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 V listing due to intrinsic safety	
SUBSTANCE NOTES: The material used as the reinforcement component in this roofing and waterproofing membrane.				

POLYETHYLENE

ID: 9002-88-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-04-09 7:11:53		
?: 0.1000 - 1.5000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Anti-adhesive 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: The material used as a film surface material and burns when the membrane is installed in this roofing and waterproofing membrane.		

SILICA, CHRISTOBALITE - RESPIRABLE

ID: 14464-46-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-04-09 7:11:53		
%: 0.1000 - 1.0000	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Heat or UV stabilizer	
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	US NIH - Report on Carcinogens		Known to be Human Carcinogen (respirable size - occupational setting)		
CAN	MAK		Carcinogen Group 1 - Substances that cause cancer in man		
CAN	IARC		Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources		
CAN	US NIH - Report on Carcinogens		Known to be a human Carcinogen		
CAN	GHS - Japan		H350 - May cause cancer [Carcinogenicity - Category 1A]		
CAN	GHS - Australia		H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]		
CAN	GHS - New Zealand		Carcinogenicity category 1		
MAM	GHS - Japan		H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]		
GEN	GHS - Japan		H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]		
MAM	GHS - Australia		H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]		
MAM	GHS - New Zealand		Specific target organ toxicity - repeated exposure category 1		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION		
None found			No listings found on Additional Hazard Lists		

SUBSTANCE NOTES: Highly reflective granule component.

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	N/A	
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2019-11-18 00:00:00	CERTIFIER OR LAB: N/A
APPLICABLE FACILITIES: All	EXPIRY DATE:	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES: VOC Emissions testing has not been performed for this product.		

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

Paradiene 30 FR TG BW meets or exceeds the requirements of ASTM D 6163 Type I, Grade G, and CSA A123.23-15 Type A, Grade 1 for SBS-modified bituminous sheet materials using glass fiber reinforcements.

MANUFACTURER INFORMATION

MANUFACTURER: **Siplast, Inc.**
ADDRESS: **1111 Highway 67 South**
Arkadelphia, Arkansas 71923
COUNTRY: **USA**

WEBSITE: **www.siplast.com**
CONTACT NAME: **James Kirby**
TITLE: **Building Science, Industry Relations, and Compliance**
PHONE: **3125056630**
EMAIL: **james.kirby@siplast.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-P1 List Translator Possible 1 (Possible Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS No GreenScreen.
BM-U 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, 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

