

HPD UNIQUE IDENTIFIER: 145595310080

CLASSIFICATION: 09 60 00 Flooring

PRODUCT DESCRIPTION: Protecto-Coat 900 exhibits a high cross-link density and offers the best solvent and acid resistance. Protecto-Coat 900 systems are filled with Mica flakes to reduce the coefficient of expansion and provide a chemical-resistant barrier. The lamellar arrangement of flakes reduces water vapor permeation and permits chemical exposure at higher temperatures without increasing the thickness of the coating.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

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

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

PROTECTO-COAT 900 [EPOXY VINYL ESTER RESIN Not Screened
STYRENE BM-1] END | MUL | CAN | REP | SKI | EYE | MAM | DEV |
GEN | AQU MICA LT-UNK | MAM TITANIUM DIOXIDE BM-1] CAN | END
| MAM CUMENE HYDROPEROXIDE LT-P1] MUL | SKI | AQU | MAM |
GEN | EYE QUARTZ BM-1] CAN | MAM | GEN CUMENE LT-1] CAN |
END | MUL | AQU | MAM | EYE 1-HYDROXYCUMENE LT-UNK] SKI |
MAM ACETOPHENONE LT-UNK] EYE | MAM | SKI | REP CARBON
BLACK BM-1] CAN | EYE | MAM | PHY COBALT BIS-(2-
ETHYLHEXANOATE) LT-1] MUL | CAN | RES | GEN | REP | EYE | MAM
| AQU | SKI N,N-DIMETHYLANILINE LT-P1] CAN | MUL | AQU | MAM |
EYE 2-ETHYLHEXYL FUMARATE LT-P1] MUL]

Number of Greenscreen BM-4/BM3 contents ... 0
Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ...
BM-1, LT-P1, LT-1
Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

This HPD was generated with basic inventory information.

*Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. For this reason, this score is intentionally omitted from the "Contents highest concern" line above. See HPDC's Special Conditions policy for more information.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): 73.5 Regulatory (g/l): 73.5
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: EPA Method 24 - Volatile Matter Content (EPA 24)
LCA: Environmental Product Declaration (EPD) by Smart EPD

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?	PREPARER: Self-Prepared	SCREENING DATE: 2024-10-03
☐ Yes	VERIFIER:	PUBLISHED DATE: 2024-10-08
☒ No	VERIFICATION #:	EXPIRY DATE: 2027-10-03

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

PROTECTO-COAT 900

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No

RESIDUALS AND IMPURITIES NOTES: Protecto-Coat 900 has no known residuals or impurities.

OTHER PRODUCT NOTES: N/A

EPOXY VINYL ESTER RESIN

ID: Unknown

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: Not Screened	
%: 30.0000 - 50.0000	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: proprietary				

STYRENE

ID: 100-42-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-10-03 10:49:27	
%: 20.0000 - 40.0000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Monomer
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		
END	ChemSec - SIN List	Endocrine Disruption		
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters		
CAN	CA EPA - Prop 65	Carcinogen		
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen		
CAN	IARC	Group 2a - Agent is probably Carcinogenic to humans		
CAN	MAK	Carcinogen Group 5 - Genotoxic carcinogen with very slight risk under MAK/BAT levels		

END	EU - Priority Endocrine Disruptors	Category 1 - In vivo evidence of Endocrine Disruption Activity
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
CAN	GHS - Japan	H350 - May cause cancer [Carcinogenicity - Category 1B]
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
DEV	EU - GHS (H-Statements) Annex 6 Table 3-1	H361d - Suspected of damaging the unborn child [Reproductive toxicity - Category 2]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
CAN	GHS - New Zealand	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 - Australia	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
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
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
MAM	GHS - New Zealand	Acute inhalation toxicity category 3
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
REP	GHS - New Zealand	Reproductive toxicity category 2
AQU	GHS - Japan	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 2

AQU	GHS - Japan	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
SKI	GHS - Malaysia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
GEN	GHS - New Zealand	Germ cell mutagenicity category 2
EYE	GHS - Japan	H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]
DEV	GHS - Australia	H361d - Suspected of damaging the unborn child [Reproductive toxicity - Category 2]
EYE	GHS - Malaysia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Some Solvents
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
SUBSTANCE NOTES:		

MICA

ID: 12001-26-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-10-03 10:49:28		
%: 10.0000 - 25.0000	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:					

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-10-03 10:49:28		
%: 2.0000 - 10.0000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Filler	

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]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 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:		

CUMENE HYDROPEROXIDE

ID: 80-15-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-10-03 10:49:29	
%: 1.0000 - 10.0000	GreenScreen: LT-P1	RC: None	NANO: No SUBSTANCE ROLE: Initiator

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H331 - Toxic if inhaled [Acute toxicity (inhalation) - Category 3]
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 - Australia	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
MAM	GHS - New Zealand	Specific target organ toxicity - repeated 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 - Australia	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 2
MAM	GHS - Japan	H371 - May cause damage to organs [Specific target organs/systemic toxicity following single exposure - Category 2]
AQU	GHS - Australia	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
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	Québec CSST - WHMIS 1988	Class D1A - Very toxic material causing immediate and serious toxic effects
GEN	GHS - New Zealand	Germ cell mutagenicity category 2
MAM	GHS - Japan	H311 - Toxic in contact with skin [Acute Toxicity (dermal) - Category 3]
MAM	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
MAM	GHS - New Zealand	Acute dermal toxicity category 2

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

QUARTZ

ID: 14808-60-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2024-10-03 10:49:28
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%: 0.5000 - 2.0000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Filler
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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	IARC	Group 1 - Agent is Carcinogenic to humans
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:		

CUMENE

ID: 98-82-8

%: **0.0100 - 1.0000**

GreenScreen: **LT-1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Initiator**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
CAN	CA EPA - Prop 65	Carcinogen
CAN	IARC	Group 2b - Possibly carcinogenic to humans
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CAN	GHS - Australia	H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]
CAN	GHS - Japan	H350 - May cause cancer [Carcinogenicity - Category 1B]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
EYE	GHS - New Zealand	Eye irritation category 2
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 2
AQU	GHS - Australia	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
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]
AQU	GHS - Malaysia	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
CAN	EU - REACH Annex XVII CMRs	Carcinogens: Category 1B
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H304 - May be fatal if swallowed and enters airways [Aspiration hazard - Category 1]
MAM	GHS - Malaysia	H304 - May be fatal if swallowed and enters airways [Aspiration hazard - Category 1]
MAM	GHS - Australia	H304 - May be fatal if swallowed and enters airways [Aspiration hazard - Category 1]

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]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
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:		

CARBON BLACK

ID: 1333-86-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-10-03 10:49:30	
%: 0.0100 - 0.5000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment
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	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route		
CAN	IARC	Group 2b - Possibly carcinogenic to humans		
EYE	GHS - New Zealand	Eye irritation category 2		
CAN	GHS - New Zealand	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]		
PHY	GHS - Japan	H251 - Self-heating;; may catch fire [Self-heating substances and mixtures - Category 1]		

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

COBALT BIS(2-ETHYLHEXANOATE)

ID: 136-52-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-10-03 10:49:30	
%: 0.0100 - 0.5000	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Catalyst
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
MUL	German FEA - Substances Hazardous to Waters		Class 3 - Severe Hazard to Waters	
CAN	MAK		Carcinogen Group 2 - Considered to be carcinogenic for man	
RES	MAK		Sensitizing Substance Sah - Danger of airway & skin sensitization	
GEN	MAK		Germ Cell Mutagen 3a	
CAN	GHS - Australia		H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]	
REP	GHS - Korea		H360 - May damage fertility or the unborn child [Category 1(1B)]	
CAN	GHS - Korea		H350 - May cause cancer [Carcinogenicity - Category 1]	
EYE	GHS - Australia		H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]	
CAN	GHS - Japan		H351 - Suspected of causing cancer [Carcinogenicity - Category 2]	
MAM	GHS - Australia		H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]	
AQU	GHS - Korea		H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]	
AQU	GHS - Korea		H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]	
SKI	GHS - Korea		H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]	
GEN	GHS - Korea		H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]	
RES	GHS - Japan		H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled [Respiratory sensitization - Category 1A]	
REP	GHS - Australia		H360Fd - May damage fertility. Suspected of damaging the unborn child [Reproductive toxicity - Category 1A or 1B]	

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Children's Products
SUBSTANCE NOTES:		

N,N-DIMETHYLANILINE

ID: 121-69-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-10-03 10:49:31	
%: 0.0100 - 0.5000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Catalyst
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification		
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters		
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]		
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]		
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H331 - Toxic if inhaled [Acute toxicity (inhalation) - Category 3]		
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H301 - Toxic if swallowed [Acute toxicity (oral) - Category 3]		
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H311 - Toxic in contact with skin [Acute toxicity (dermal) - Category 3]		
CAN	GHS - New Zealand	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]		
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]		
MAM	GHS - New Zealand	Acute inhalation toxicity category 3		
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen		
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 2		

AQU	GHS - Australia	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
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]
AQU	GHS - Korea	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
MAM	Québec CSST - WHMIS 1988	Class D1A - Very toxic material causing immediate and serious toxic effects
MAM	GHS - Australia	H301 - Toxic if swallowed [Acute toxicity (oral) - Category 3]
MAM	GHS - Australia	H311 - Toxic in contact with skin [Acute toxicity (dermal) - Category 3]
MAM	GHS - Australia	H331 - Toxic if inhaled [Acute toxicity (inhalation) - Category 3]
MAM	GHS - New Zealand	Acute dermal toxicity category 3
MAM	GHS - New Zealand	Acute oral toxicity category 3
EYE	GHS - Japan	H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]
MAM	GHS - Korea	H331 - Toxic if inhaled [Acute toxicity (inhalation) - Category 3]
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
CAN	GHS - Korea	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: vapor) - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List
		Some Solvents
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Children's Products
SUBSTANCE NOTES:		

2-ETHYLHEXYL FUMARATE		ID: 141-02-6
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-10-03 10:49:31
%: 0.0100 - 0.1000	GreenScreen: LT-P1	RC: None
	NANO: No	SUBSTANCE ROLE: Solvent

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List
		Some Solvents
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 - Not tested	
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2024-09-18 00:00:00	CERTIFIER OR LAB: None
APPLICABLE FACILITIES: All	EXPIRY DATE:	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES:		

VOC CONTENT	EPA Method 24 - Volatile Matter Content (EPA 24)	
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2024-09-18 00:00:00	CERTIFIER OR LAB: Dudick
APPLICABLE FACILITIES: All	EXPIRY DATE:	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES:		

LCA	Environmental Product Declaration (EPD) by Smart EPD	
CERTIFYING PARTY: Third Party	ISSUE DATE: 2023-12-23 00:00:00	CERTIFIER OR LAB: Smart EPD
APPLICABLE FACILITIES: All	EXPIRY DATE: 2028-12-23 00:00:00	
CERTIFICATE URL: https://smartepd.com/epd-library/658058c42f2d8d9dc3d3276f		
CERTIFICATION AND COMPLIANCE NOTES:		

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

Based on raw material supplier information, the product is estimated to have no residuals/impurities over 100 ppm.

MANUFACTURER INFORMATION

MANUFACTURER: **Carboline**
ADDRESS: **Dudick, Inc.**
1818 Miller Parkway
Streetsboro, OH 44241
COUNTRY: **United States**

WEBSITE: **www.dudick.com**
CONTACT NAME: **Jamie Valdez**
TITLE: **Global Product Support Specialist**
PHONE: **3146441000**
EMAIL: **sustainability@carboline.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

