Protecto-Flex BC by Carboline

Health Product Declaration v2.3

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 120763902976
CLASSIFICATION: 09 67 23 Resinous Flooring
PRODUCT DESCRIPTION: A flexibilized epoxy resin that, when mixed with silica filler, will reduce the coefficient of expansion and provide a thixotropic base on which to embed fabric reinforcement. The added flexibility provides strength when bridging small surface cracks and increases resistance to thermal shock.

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

PROTECTO-FLEX BC [BISPHENOL A EPICHLOROHYDRIN POLYMER LT-P1 | MUL | SKI | EYE | AQU **POLYETHYLENEPOLYAMINE, DIMER FATTY ACID CONDENSATE** BM-1 | MUL | SKI | EYE **ISOPHORONE DIAMINE** LT-P1 | SKI | MUL | EYE | AQU **ALKYL (C12, C14) GLYCIDYL ETHER** LT-P1 | MUL | SKI **BENZYL ALCOHOL** BM-2 | EYE | MAM | SKI | AQU **FORMALDEHYDE, POLYMER WITH 2-(CHLOROMETHYL)OXIRANE AND PHENOL** LT-P1 | MUL **M-XYLENE** LT-P1 | MUL | SKI | EYE | MAM | REP | AQU **N-(2-AMINOETHYL)PIPERAZINE** LT-P1 | MUL | SKI | EYE | AQU | MAM **2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL** LT-UNK | SKI | EYE **TETRADECANOIC ACID, 1-[(PHOSPHONOOXY)METHYL]-1,2-ETHANEDIYL ESTER, (R)-** NoGS **P-TERT-BUTYLPHENOL** LT-1 | END | SKI | MUL | AQU | EYE | REP | MAM **P-XYLENE** LT-P1 | END | MUL | SKI | MAM | EYE | REP | AQU **ETHYLBENZENE** BM-1 | END | SKI | CAN | REP | PHY | MAM | EYE | AQU **SILOXANES AND SILICONES, DI-ME, REACTION PRODUCTS WITH SILICA** LT-UNK **TOLUENE** BM-1 | END | DEV | MUL | REP | SKI | PHY | MAM | EYE | AQU **]**

Number of Greenscreen BM-4/BM3 contents ... 0

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1, BM-1, 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): 88 Regulatory (g/l): 88
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: SCAQMD Rule 1113 Architectural Coatings - Flats, floor coatings, non flat coatings, quick dry enamels, roof coatings only - 2007 amendments
LCA: Environmental Product Declaration (EPD) by NSF

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.
Pre-checked for LEED v4.1 Option 1.

Third Party Verified?

- ○ Yes
- ◉ No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2024-07-23
PUBLISHED DATE: 2024-10-04
EXPIRY DATE: 2027-07-23

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

PROTECTO-FLEX BC

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No

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

OTHER PRODUCT NOTES: N/A

BISPHENOL A EPICHLOROHYDRIN POLYMER ID: 25068-38-6

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-09-24 7:59:51**

%: **20.0000 - 40.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Binder**

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	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]
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]
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]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
SKI	GHS - New Zealand	Skin sensitisation category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 2
AQU	GHS - Japan	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Japan	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - Australia	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]

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 Core Restrictions
RESTRICTED LIST	International Living Future Institute (ILFI)	Living Building Challenge 4.0 - Red List of Materials & Chemicals - Effective April 1, 2024 Red List substances to avoid in Living Building Challenge V4.0 projects

SUBSTANCE NOTES:

POLYETHYLENEPOLYAMINE, DIMER FATTY ACID CONDENSATE

ID: **68410-23-1**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-09-24 8:07:09**

%: **10.0000 - 20.0000** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Curing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
SKI	GHS - New Zealand	Skin corrosion category 1C
EYE	GHS - New Zealand	Serious eye damage category 1

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

SUBSTANCE NOTES:

ISOPHORONE DIAMINE

ID: **2855-13-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-09-24 8:14:42**

%: **5.0000 - 20.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Curing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
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]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]
SKI	GHS - New Zealand	Skin corrosion category 1C
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 3
SKI	GHS - New Zealand	Skin sensitisation category 1

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

SUBSTANCE NOTES:

ALKYL (C12, C14) GLYCIDYL ETHER ID: **68609-97-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-09-24 8:01:43**

%: **5.0000 - 15.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Diluent**

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	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
SKI	GHS - New Zealand	Skin irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
SKI	GHS - New Zealand	Skin sensitisation category 1

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

SUBSTANCE NOTES:

BENZYL ALCOHOL

ID: **100-51-6**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-09-24 8:09:23**

%: **2.0000 - 10.0000** GreenScreen: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Solvent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
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	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]
SKI	GHS - New Zealand	Skin sensitisation category 1
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]

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

SUBSTANCE NOTES:

FORMALDEHYDE, POLYMER WITH 2-(CHLOROMETHYL)OXIRANE AND PHENOL

ID: **9003-36-5**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-09-24 8:16:29**

%: **2.0000 - 10.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Binder**

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	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Core Restrictions

SUBSTANCE NOTES:

M-XYLENE ID: **108-38-3**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-09-24 8:15:34**

%: **2.0000 - 6.0000** 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
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
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]
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]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
REP	GHS - New Zealand	Reproductive toxicity category 2
EYE	GHS - Korea	H319 - Causes serious eye irritation [Serious eye damage/irritation - Category 2]
SKI	GHS - Korea	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	GHS - Korea	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - Repeated exposure - Category 1]
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]
SKI	GHS - Malaysia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	GHS - Australia	H304 - May be fatal if swallowed and enters airways [Aspiration hazard - Category 1]

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

SUBSTANCE NOTES:

N-(2-AMINOETHYL)PIPERAZINE ID: **140-31-8**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-09-24 8:19:18**

%: **2.0000 - 5.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Curing agent**

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]
SKI	GHS - New Zealand	Skin corrosion category 1C
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 3
SKI	GHS - New Zealand	Skin sensitisation category 1
MAM	GHS - Japan	H311 - Toxic in contact with skin [Acute Toxicity (dermal) - Category 3]

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

SUBSTANCE NOTES:

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL ID: **90-72-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-09-24 8:20:53**

%: **2.0000 - 5.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Curing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
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]
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]
SKI	GHS - New Zealand	Skin corrosion category 1C
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]

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

SUBSTANCE NOTES:

TETRADECANOIC ACID, 1-[(PHOSPHONOOXY)METHYL]-1,2-ETHANEDIYL ESTER, (R)- ID: **28874-52-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-09-24 8:32:29**

%: **1.0000 - 3.0000** GreenScreen: **NoGS** 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
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

P-TERT-BUTYLPHENOL ID: **98-54-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-09-24 8:28:29**

%: **0.0100 - 2.0000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Curing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
END	OSPAR - Priority PBTs & EDs & equivalent concern	Endocrine Disruptor - Substance of Possible Concern

END	ChemSec - SIN List	Endocrine Disruption
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
END	EU - Priority Endocrine Disruptors	Category 2 - In vitro evidence of biological activity related to Endocrine Disruption
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]
REP	EU - GHS (H-Statements) Annex 6 Table 3-1	H361f - Suspected of damaging fertility [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 - Japan	H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
AQU	GHS - Australia	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
REP	EU - Annex VI CMRs	Reproductive Toxicity - 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]
EYE	GHS - Australia	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]
REP	GHS - Australia	H361f - Suspected of damaging fertility [Reproductive toxicity - Category 2]
END	EU - SVHC List	Equivalent Concern - Candidate List: endocrine disrupting properties cause probable serious effects to the environment or human health

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 Cosmetics & Personal Care Products

SUBSTANCE NOTES:

P-XYLENE ID: **106-42-3**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-09-24 8:29:11**

%: **0.0100 - 2.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Solvent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - 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]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
REP	GHS - New Zealand	Reproductive toxicity category 2
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
EYE	GHS - Korea	H319 - Causes serious eye irritation [Serious eye damage/irritation - Category 2]
SKI	GHS - Korea	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	GHS - Korea	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - Repeated exposure - Category 1]
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]
SKI	GHS - Malaysia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	GHS - Australia	H304 - May be fatal if swallowed and enters airways [Aspiration hazard - Category 1]

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

SUBSTANCE NOTES:

ETHYLBENZENE ID: **100-41-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-09-24 8:30:55**

%: **0.5000 - 2.0000** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Solvent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
CAN	CA EPA - Prop 65	Carcinogen
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
CAN	IARC	Group 2b - Possibly carcinogenic to humans
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H225 - Highly flammable liquid and vapour [Flammable liquids - 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
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
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]
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]
AQU	GHS - Japan	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
PHY	GHS - New Zealand	Flammable liquids category 2
PHY	GHS - Japan	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
PHY	GHS - Malaysia	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
PHY	GHS - Australia	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
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 - Australia	H304 - May be fatal if swallowed and enters airways [Aspiration hazard - Category 1]

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 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:

SILOXANES AND SILICONES, DI-ME, REACTION PRODUCTS WITH SILICA ID: **67762-90-7**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-09-24 8:34:27**

%: **1.0000 - 2.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

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:

TOLUENE ID: **108-88-3**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-09-24 8:33:07**

%: **0.0100 - 0.0500** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Solvent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
DEV	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant
DEV	CA EPA - Prop 65	Developmental toxicity
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1A]
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]

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]
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]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
REP	GHS - New Zealand	Reproductive toxicity category 2
REP	GHS - Korea	H361 - Suspected of damaging fertility or the unborn child [Reproductive toxicity - Category 2]
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 2
SKI	GHS - Korea	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]
SKI	GHS - Malaysia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
PHY	GHS - Korea	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
PHY	GHS - New Zealand	Flammable liquids category 2
PHY	GHS - Japan	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
PHY	GHS - Malaysia	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
DEV	GHS - Malaysia	H361d - Suspected of damaging the unborn child [Reproductive toxicity - Category 2]
PHY	GHS - Australia	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
DEV	GHS - Japan	H362 - May cause harm to breast-fed children [Developmental Toxicity - May cause harm to breast-fed children]
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]

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
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

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
APPLICABLE FACILITIES: All
CERTIFICATE URL:

ISSUE DATE: 2024-09-24 00:00:00
EXPIRY DATE:

CERTIFIER OR LAB: None

CERTIFICATION AND COMPLIANCE NOTES:

VOC CONTENT — **SCAQMD Rule 1113 Architectural Coatings - Flats, floor coatings, non flat coatings, quick dry enamels, roof coatings only - 2007 amendments**

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

ISSUE DATE: 2024-09-24 00:00:00
EXPIRY DATE:

CERTIFIER OR LAB: Dudick

CERTIFICATION AND COMPLIANCE NOTES:

LCA — **Environmental Product Declaration (EPD) by NSF**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: All
CERTIFICATE URL: https://smartepd.com/epd-library/6580591c2f2d8d9dc3d3282a

ISSUE DATE: 2023-12-23 00:00:00
EXPIRY DATE: 2028-12-23 00:00:00

CERTIFIER OR LAB: Smart EPD

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

The product is estimated to have no residuals / impurities over 100 ppm based on raw material supplier information.

Section 6: References

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
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.