

HPD UNIQUE IDENTIFIER: 2008382464

CLASSIFICATION: 07 42 13.19 Insulated Metal Wall Panels

PRODUCT DESCRIPTION: Formawall Dimension Series insulated metal panels combine thermal efficiency and moisture control into one product. Dimension Series panels consist of a polyisocyanurate foam core in between a painted galvanized steel face and liner. The pressure-equalized joinery acts as the primary air, water, and vapor barrier for the wall assembly. Panel thickness, panel width, and liner gage vary on a project-by-project basis; therefore, ratios of ingredients will also vary.

Section 1: Summary

Nested Method / Material 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 type="radio"/> Basic Method	<input type="radio"/> 100 ppm <input type="radio"/> 1,000 ppm <input type="radio"/> Per GHS SDS <input checked="" type="radio"/> Other	Completed in 3 of 3 Materials Explanation(s) provided for Residuals/Impurities? <input checked="" type="radio"/> Yes <input type="radio"/> No	Characterized <input checked="" type="radio"/> Yes <input type="radio"/> No <i>Provided weight and role.</i> Screened <input checked="" type="radio"/> Yes <input type="radio"/> No <i>Provided screening results using HPDC-approved methods.</i> Identified <input type="radio"/> Yes <input checked="" type="radio"/> No <i>Provided name and CAS RN or other identifier.</i>
Threshold Disclosed Per			
<input checked="" type="radio"/> Material <input type="radio"/> 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

GALVANIZED STEEL LINERS [STEEL (STEEL) NoGS ZINC (ZINC) LT-P1] MUL | AQU] **POLYISOCYANURATE FOAM INSULATION [POLYISOCYANURATE FOAM NoGS FIRE RETARDANT 2 NoGS CYCLOPENTANE (CYCLOPENTANE) LT-UNK]** PHY | MAM | EYE | AQU **POTASSIUM SALT NoGS ISOPENTANE (ISOPENTANE) LT-P1]** MUL | AQU | PHY | MAM | EYE **N-PENTANE LT-P1]** MUL | PHY | AQU | MAM | EYE] **NON-CURING BUTYL SEALANT [KAOLIN CLAY (CLAY) LT-UNK]** CAN **LIMESTONE; CALCIUM CARBONATE (CALCIUM CARBONATE) BM-3dg STODDARD SOLVENT (STODDARD SOLVENT) LT-1]** CAN | MUL | GEN | MAM | SKI | AQU **RESIDUAL OILS, PETROLEUM, SOLVENT-DEWAXED (RESIDUAL OILS, PETROLEUM, SOLVENT-DEWAXED) LT-1]** CAN | PBT | MUL | SKI | DEV **DISTILLATE FUEL OILS, LIGHT (DISTILLATE FUEL OILS, LIGHT) BM-2]** CAN | AQU | MAM **TITANIUM DIOXIDE (TITANIUM DIOXIDE) BM-1]** CAN | END | MAM **QUARTZ (CRYSTALLINE SILICA/SILICA SAND) BM-1]** CAN | MAM | GEN **1,2,4-TRIMETHYLBENZENE (1,2,4-TRIMETHYLBENZENE) BM-2]** MUL | SKI | EYE | AQU | MAM **NONANE (NONANE) LT-P1]** END | MAM | EYE | SKI | AQU]

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

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

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Galvanized steel face and liner are protected from the elements with a PVDF paint and primer coating. Due to the wide variety of colors, thicknesses, and types of finishes offered, this HPD does not consider paints, finishes, or coatings in the materials listed. Coating ingredients can be determined on a project-by-project basis once a specific finish is determined. CENTRIA is able to provide a red list compliant Fluorofinish Pure coating system. Any coating applied to the surfaces of these panels is coil-applied prior to the forming of the panel; as a result, no VOCs are generated at the job site due to field-painting operations. VOC content values provided are specifically for the non-curing butyl sealant used in the side-joinery and at perimeter seals.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): 155 Regulatory (g/l): 151
 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: VOC Emissions
 VOC content: VOC Content
 Environmental Product Declaration: Environmental Product Declaration (EPD)

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

Yes

No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2024-10-24

PUBLISHED DATE: 2024-10-24

EXPIRY DATE: 2027-10-24

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

GALVANIZED STEEL LINERS

%: 72.8200 - 90.9700

MATERIAL THRESHOLD: Per GHS SDS RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Metal

RESIDUALS AND IMPURITIES NOTES: G90 galvanized steel may contain trace amounts of impurities and other residual metals from recycling processes.

OTHER MATERIAL NOTES: Average recycled content of steel is 19.8% post-consumer, 14.4% pre-consumer per the latest data from the Steel Recycling Institute. (Note that LEED's default values for steel are 25% post-consumer, 0% pre-consumer.) Actual steel recycled content will vary per project. The overall total recycled content of the panel will vary based on panel thickness, panel module, and liner gages.

STEEL (STEEL)

ID: 12597-69-2

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2024-10-24 9:14:18**%: **99.9000 - 100.0000**GreenScreen: **NoGS**RC: **Both**NANO: **No**SUBSTANCE ROLE: **Alloy element**

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: See material description for recycled content percentages. The overall total recycled content of the panel will vary based on panel thickness, panel module, and liner gages. Steel consists of metal alloys with the following CAS numbers: 7439-89-6, 7439-96-5, 7440-47-3, 7440-21-3, 7440-02-0, 7440-62-2, and 7440-44-0. See material notes for recycled content of steel.

ZINC (ZINC)

ID: 7440-66-6

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2024-10-24 9:14:18**%: **0.0000 - 0.1000**GreenScreen: **LT-P1**RC: **Both**NANO: **No**SUBSTANCE ROLE: **Galvanizing**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Antimicrobials
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: See material notes for recycled content of steel.

POLYISOCYANURATE FOAM INSULATION

#: 8.5500 - 26.9800

MATERIAL THRESHOLD: Other

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: No halogen-based ingredients are intentionally added to the foam mixture. Prior to the foam reaction during panel manufacturing, ingredients are mixed in liquid form within tanks. The final product may contain trace residuals of halogenated compounds and chlorobenzene (CAS# 108-90-7) remaining from previous products mixed in the same tank. They are not intentionally added components.

OTHER MATERIAL NOTES: Polyisocyanurate foam free of intentionally-added halogenated compounds. This particular foam blend was created uniquely for this product; therefore, no specific CAS# is applicable. The closest resemblance is CAS# 27026-93-3. Approximate percentage amounts of substances of the post-reaction foam were derived from reaction chemistry.

POLYISOCYANURATE FOAM

ID: **Not Registered**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2024-10-24 9:14:18**

#: **84.2300 - 90.2500**

GreenScreen: **NoGS**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Polymer species**

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: Polyisocyanurate foam free of intentionally-added halogenated compounds. This particular foam blend was created uniquely for this product; therefore, no specific CAS# is applicable. The closest resemblance is CAS# 27026-93-3. Approximate percentage amounts of substances of the post-reaction foam were derived from reaction chemistry.

FIRE RETARDANT 2

ID: **Unknown**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2024-10-24 9:14:19**

#: **5.1000 - 10.0000**

GreenScreen: **NoGS**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Flame retardant**

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: Proprietary non-halogenated fire retardant. Approximate percentage amounts of substances of the post-reaction foam were derived from reaction chemistry.

CYCLOPENTANE (CYCLOPENTANE)

ID: **287-92-3**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2024-10-24 9:14:19**

#: **2.6950 - 2.9050**

GreenScreen: **LT-UNK**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Blowing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
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
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 3
PHY	GHS - New Zealand	Flammable liquids category 2
PHY	GHS - Japan	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
PHY	GHS - Australia	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Some Solvents

SUBSTANCE NOTES: Ingredient in blowing agent component of foam system. Approximate percentage amounts of substances of the post-reaction foam were derived from reaction chemistry.

POTASSIUM SALT

ID: **Unknown**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-10-24 9:14:19**

#: **0.8000 - 1.4000** GreenScreen: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Catalyst**

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: Component of polyol blend that remains after the foam reaction. Approximate percentage amounts of substances of the post-reaction foam were derived from reaction chemistry.

ISOPENTANE (ISOPENTANE)

ID: **78-78-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-10-24 9:14:19**

#: **1.1550 - 1.2450** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Blowing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
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]
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H224 - Extremely flammable liquid and vapour [Flammable liquids - Category 1]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
EYE	GHS - New Zealand	Eye irritation 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]
PHY	GHS - New Zealand	Flammable liquids category 1
PHY	GHS - Japan	H224 - Extremely flammable liquid and vapour [Flammable liquids - Category 1]
PHY	GHS - Australia	H224 - Extremely flammable liquid and vapour [Flammable liquids - Category 1]
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

SUBSTANCE NOTES: Ingredient in blowing agent component of foam system. Approximate percentage amounts of substances of the post-reaction foam were derived from reaction chemistry.

N-PENTANE

ID: 109-66-0

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-10-24 9:14:20**

#: **0.0000 - 0.2200** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Blowing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H225 - Highly flammable liquid and vapour [Flammable liquids - 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	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
EYE	GHS - New Zealand	Eye irritation 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]
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]
AQU	GHS - Malaysia	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	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

SUBSTANCE NOTES: Ingredient in blowing agent component of foam system. Approximate percentage amounts of substances of the post-reaction foam were derived from reaction chemistry.

RESIDUALS AND IMPURITIES NOTES: Residual oils may contain petroleum.

OTHER MATERIAL NOTES: Material percentages only account for factory-installed butyl located in the panel joinery. Actual amount of butyl used in the field may be higher depending on project-specific sealing conditions.

KAOLIN CLAY (CLAY)

ID: 1332-58-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-10-24 9:14:20**

#: **30.0000 - 60.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Sealant**

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: Ingredient in non-curing butyl sealant.

LIMESTONE; CALCIUM CARBONATE (CALCIUM CARBONATE)

ID: 1317-65-3

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-10-24 9:14:21**

#: **15.0000 - 40.0000** GreenScreen: **BM-3dg** RC: **None** NANO: **No** SUBSTANCE ROLE: **Sealant**

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: Ingredient in non-curing butyl sealant.

STODDARD SOLVENT (STODDARD SOLVENT)

ID: 8052-41-3

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-10-24 9:14:20**

#: **7.0000 - 13.0000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Sealant**

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
GEN	EU - Annex VI CMRs	Mutagen - Category 1B
CAN	GHS - Australia	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
GEN	GHS - Australia	H340 - May cause genetic defects [Germ cell mutagenicity - Category 1A or 1B]
CAN	GHS - Malaysia	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
GEN	GHS - Malaysia	H340 - May cause genetic defects [Germ cell mutagenicity - Category 1A or 1B]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
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]
GEN	EU - GHS (H-Statements) Annex 6 Table 3-1	H340 - May cause genetic defects [Germ cell mutagenicity - Category 1A or 1B]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - 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]
CAN	EU - REACH Annex XVII CMRs	Carcinogens: Category 1B
GEN	EU - REACH Annex XVII CMRs	Germ cell mutagens: 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]

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 Core Restrictions
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

SUBSTANCE NOTES: Ingredient in non-curing butyl sealant.

RESIDUAL OILS, PETROLEUM, SOLVENT-DEWAXED (RESIDUAL OILS, PETROLEUM, SOLVENT-DEWAXED)

ID: 64742-62-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2024-10-24 9:14:21**

%: **5.0000 - 10.0000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MUL	German FEA - Substances Hazardous to Waters	Class 2 - 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]
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
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 v4.0 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

SUBSTANCE NOTES: Residual ingredient in non-curing butyl sealant.

DISTILLATE FUEL OILS, LIGHT (DISTILLATE FUEL OILS, LIGHT)

ID: 64742-47-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-10-24 9:14:21**

%: **1.0000 - 5.0000** GreenScreen: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Sealant**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
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	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

SUBSTANCE NOTES: Ingredient in non-curing butyl sealant.

TITANIUM DIOXIDE (TITANIUM DIOXIDE)

ID: 13463-67-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-10-24 9:14:22**

%: **1.0000 - 5.0000** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Sealant**

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: Ingredient in non-curing butyl sealant.

QUARTZ (CRYSTALLINE SILICA/SILICA SAND)

ID: 14808-60-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2024-10-24 9:14:22**

#: **0.5000 - 1.5000**

GreenScreen: **BM-1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Sealant**

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: Ingredient in non-curing butyl sealant.

1,2,4-TRIMETHYLBENZENE (1,2,4-TRIMETHYLBENZENE)

ID: 95-63-6

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2024-10-24 9:14:22**

#: **0.1000 - 1.0000**

GreenScreen: **BM-2**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Sealant**

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]
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]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
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]

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

SUBSTANCE NOTES: Ingredient in non-curing butyl sealant.

NONANE (NONANE)

ID: 111-84-2

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2024-10-24 9:14:22**

%: **0.1000 - 1.0000**

GreenScreen: **LT-P1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Sealant**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
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 - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
MAM	GHS - Japan	H371 - May cause damage to organs [Specific target organs/systemic toxicity following single exposure - 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 - New Zealand	Hazardous to the aquatic environment - chronic 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: Ingredient in non-curing butyl sealant.

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

VOC Emissions

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: Sheridan, AR
CERTIFICATE URL:

ISSUE DATE: 2021-08-31 00:00:00
EXPIRY DATE:

CERTIFIER OR LAB: Self-Declared

CERTIFICATION AND COMPLIANCE NOTES: Neither Formawall Dimension Series nor the non-curing butyl sealant have been tested for VOC emissions in accordance with CDPH Standard Method v1.1 or similar. See VOC Content section for content of non-curing butyl sealant.

VOC CONTENT

VOC Content

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: Sheridan, AR
CERTIFICATE URL:

ISSUE DATE: 2021-08-31 00:00:00
EXPIRY DATE:

CERTIFIER OR LAB: Self-Declared

CERTIFICATION AND COMPLIANCE NOTES: VOC content values provided are specifically for the non-curing butyl sealant used in the side-joinery and at perimeter seals. Per sealant manufacturer, material VOC content is 155 g/L and regulatory VOC content is 151 g/L.

LCA

Environmental Product Declaration (EPD)

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Sheridan, AR
CERTIFICATE URL: https://spot.ul.com/main-app/products/detail/5ad1eb1755b0e82d946a5d3e?page_type=Products%20Catalog

ISSUE DATE: 2020-10-01 00:00:00
EXPIRY DATE: 2025-10-01 00:00:00

CERTIFIER OR LAB: UL
Environment

CERTIFICATION AND COMPLIANCE NOTES: Environmental Product Declaration (EPD) developed in accordance with ISO 14025.

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.

ALUMINUM EXTRUSIONS

MANUFACTURER (OR GENERIC): **Generic**

HPD URL: No HPD available

ACCESSORY TYPE: Fastner

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Extrusions used at base, head, sill, and jamb conditions are made from 6063-T5 alloy aluminum. Type and amount of extrusions is dependent on job-specific conditions. Approximate recycled content is 30.5% post-consumer, 35.4% pre-consumer.

GALVANIZED STEEL CLIPS

MANUFACTURER (OR GENERIC): **Generic**

HPD URL: No HPD available

ACCESSORY TYPE: Fastner

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Clips used for attaching panels to support substrate made of bare G90 galvanized steel. Approximate recycled content is 19.8% post-consumer, 14.4% pre-consumer per latest Steel Recycling Institute data. (Note that LEED's default values for steel are 25% post-consumer, 0% pre-consumer.)

304 SERIES STAINLESS STEEL FASTENERS

MANUFACTURER (OR GENERIC): **Generic**

HPD URL: No HPD available

ACCESSORY TYPE: Fastener

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Fasteners used to attach panels through clips to support substrate. Standard fasteners are 304 Series stainless steel, but alternate fasteners may be used if reviewed and approved by CENTRIA. Amount of fasteners required for attachment is dependent on project-specific conditions.

Section 5: General Notes

Galvanized steel face and liner are protected from the elements with a PVDF paint and primer coating. Due to the wide variety of colors, thicknesses, and types of finishes offered, this HPD does not consider paints, finishes, or coatings in the materials listed. Coating ingredients can be determined on a project-by-project basis once a specific finish is determined. CENTRIA is able to provide a red list compliant Fluorofinish Pure coating system.

Any coating applied to the surfaces of these panels is coil-applied prior to the forming of the panel; as a result, no VOCs are generated at the job site due to field-painting operations. VOC content values provided are produced specifically by the non-curing butyl sealant used in the side-joinery and at perimeter seals. Please contact CENTRIA for more information.

MANUFACTURER INFORMATION

MANUFACTURER: **CENTRIA**
 ADDRESS: **700 State Hwy 121**
Suite 200
Lewisville, Texas 75067
 COUNTRY: **United States**

WEBSITE: **www.centria.com**
 CONTACT NAME: **Adriana Saunders**
 TITLE: **Environmental and Sustainability Manager**
 PHONE: **2052926487**
 EMAIL: **adriana.saunders@nucor.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

