TSSC PIR Sandwich Panels
by Technical Supplies & Services Co. LLC

SCREENING DATE: 2026-02-10
PUBLISHED DATE: 2026-03-02
EXPIRY DATE: 2029-02-10
PREPARER: Self-Prepared
VERIFIER: EUROCERT
VERIFICATION #: o4n-27882

Health Product Declaration v3.0
created via: HPDC Online Builder

THIRD-PARTY VERIFIED

HPD UNIQUE IDENTIFIER: 14362725601280
HPD UNIQUE PRODUCT ID: Not provided.
CLASSIFICATION: 07 40 00 Roofing and Siding Panels
PRODUCT DESCRIPTION: TSSC PIR Sandwich Panels are rigid, lightweight prefabricated panels designed for roof and wall cladding, providing high thermal insulation, fire resistance, structural rigidity, and color durability while enabling installation on lighter building frameworks. Manufactured by TSSC Group, Dubai, UAE, and classified under UN CPC 37522, these panels are suitable for sheds, garages, industrial buildings, poultry farms, warehouses, and commercial structures. Thicknesses range from 30 mm to 200 mm for specialized applications, with effective widths of 900mm, 1000 mm, 1100 mm, and 1150 mm, customization lengths, and profiles including TSP 45/250, TSP 35/205, TSP 32/366, and TSP 45/150. The core material is PIR foam, offering excellent thermal insulation and fire resistance (up to 2 hours 47 minutes for 200 mm thickness) and 83 minutes for 100mm thick. The panels are easy to install, environmentally conscious, and designed to meet consistent performance standards, making them ideal for a wide range of building envelope applications.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format
→ Nested Materials Method

Threshold Disclosed Per
→ Product

Threshold Level
→ 1,000 ppm

Residuals/Impurities Evaluation
Not Completed

Explanation(s) provided for Residuals/Impurities?
Yes

For all contents above the threshold, the manufacturer has:

Characterized Yes
Provided weight and role.

Screened Yes
Provided screening results using HPDC-approved methods.

Identified Yes
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.

NESTED MATERIAL | **MATERIAL OR SUBSTANCE** | *RESIDUAL OR IMPURITY*
GREENSCREEN SCORE | HAZARD TYPE

HOT DIP, ZINC COATED GALVANIZED STEEL SHEET [IRON, ELEMENTAL LT-P1 | END **UNS Z35531 ZINC ALLOY** LT-P1 | END | AQU | PHY **AA 6560 ALUMINUM ALLOY** LT-P1 | END | CAN | MAM | PHY **] ISOHAR 700 [POLYMETHYLENE POLYPHENYL ISOCYANATE** LT-UNK | CAN | RES | EYE | SKI | MAM **4,4'-DIPHENYLMETHANE DIISOCYANATE** LT-UNK | CAN | RES | SKI | EYE | MAM **2,4'-DIPHENYLMETHANE DIISOCYANATE** LT-UNK | SKI | EYE | CAN | MAM **] HP – PIRGL-22P [POLYETHER POLYOL (PRIMARY CASRN IS 9082-00-2)** LT-UNK **1,3-BENZENEDIAMINE, AR-METHYL-, POLYMER WITH METHYLOXIRANE** LT-UNK **1,2-ETHANEDIAMINE, POLYMER WITH 2-METHYLOXIRANE** LT-UNK **N,N-DIMETHYLCYCLOHEXYLAMINE** LT-P1 | MUL | MAM | EYE | SKI | AQU **1,2-ETHANEDIAMINE, N1-(2-(DIMETHYLAMINO)ETHYL)-N1,N2,N2-TRIMETHYL-** LT-P1 | MUL | SKI | MAM | EYE **] HP-CPIR-5721-4P [POLYETHER POLYOL (PRIMARY CASRN IS 9082-00-2)** LT-UNK **1,3-BENZENEDIAMINE, AR-METHYL-, POLYMER WITH METHYLOXIRANE** LT-UNK **1,2-ETHANEDIAMINE, POLYMER WITH 2-METHYLOXIRANE** LT-UNK **N,N-DIMETHYLCYCLOHEXYLAMINE** LT-P1 | MUL | MAM | EYE | SKI | AQU **1,2-ETHANEDIAMINE, N1-(2-(DIMETHYLAMINO)ETHYL)-N1,N2,N2-**

Number of Greenscreen BM-4/BM3 contents ... 2

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

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

No Inventory and Screening Notes

TRIMETHYL- LT-P1 | MUL | SKI | MAM | EYE] **CYCLOPENTANE [CYCLOPENTANE** LT-UNK | PHY | MAM | EYE | AQU **PENTANE** LT-P1 | MUL | PHY | AQU | MAM | EYE] **HP- CPIC-5064-P [WATER** BM-4 **ETHYLENE GLYCOL** LT-1 | END | DEV | MAM | EYE | SKI **POTASSIUM 2-ETHYLHEXANOATE** LT-1 | REP | DEV | SKI | EYE] **HP-CPIR-5840-5P [WATER** BM-4 **POLYETHER POLYOL (PRIMARY CASRN IS 9082-00-2)** LT-UNK **TRIETHYL PHOSPHATE** LT-UNK | EYE | MAM | REP **PROPYLENE GLYCOL** BM-2 | END | MAM]

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

COMPLIANCE *See Section 3 for additional listings.*

VOC emissions: Inherently non-emitting source per LEED

CONSISTENCY WITH OTHER PROGRAMS

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

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 3.0, available on the HPDC website at: www.hpd-collaborative.org/hpd-3-0-standard

HOT DIP, ZINC COATED GALVANIZED STEEL SHEET

%: 73.5490 - 81.2910

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No

MATERIAL TYPE: Metal

RESIDUALS AND IMPURITIES NOTES: Pre-painted galvanized sheets are manufactured from a carbon steel substrate that is hot-dip galvanized and finished with a polyester powder coating. The galvanized steel facings are produced in accordance with EN 10346, and the chemical composition of the steel and coating is verified through manufacturer-conducted testing and documented in the mill test certificates included with each shipment. Reported residuals and impurities reflect measured values from these manufacturer testing results as provided on the mill test certificates. Trace elements and residual constituents are therefore captured and reported based on actual analytical data from supplier documentation.

OTHER MATERIAL NOTES: Carbon-steel substrate with zinc coating and polyester paint; residual and impurity levels as verified by supplier mill test certificates.

IRON, ELEMENTAL

ID: **7439-89-6**

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

HAZARD SCREENING DATE: **2026-02-10 3:30:45**

%: **96.9000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

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

SUBSTANCE NOTES: Present as carbon steel substrate in galvanized steel sheets; residuals and trace elements as per manufacturer's mill tests.

UNS Z35531 ZINC ALLOY

ID: **7440-66-6**

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

HAZARD SCREENING DATE: **2026-02-10 3:30:46**

%: **3.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
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]
PHY	GHS - Australia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
PHY	GHS - Australia	H260 - In contact with water releases flammable gases which may ignite spontaneously [Substances and mixtures which, in contact with water, emit flammable gases - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
AQU	GHS - Australia	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 Antimicrobials

SUBSTANCE NOTES: Used as a zinc coating in galvanized steel; complies with EN 10346; residuals reported in mill certificates.

AA 6560 ALUMINUM ALLOY ID: **7429-90-5**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:30:46**

%: **0.1000 - 0.5000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
PHY	GHS - Japan	H261 - In contact with water releases flammable gas [Substances and mixtures, which in contact with water, emit flammable gases - Category 2]
PHY	GHS - Malaysia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
PHY	GHS - Australia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
PHY	GHS - New Zealand	Pyrophoric solids category 1

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products

SUBSTANCE NOTES: Present in small amounts as alloying or additive in certain coatings; residuals based on manufacturer testing.

ISOHAR 700 **%: 9.5000 - 10.5000**

PRODUCT THRESHOLD: 1000 ppm | RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No | MATERIAL TYPE: Other: Isocyanate Component

RESIDUALS AND IMPURITIES NOTES: Residual monomers, catalysts, or by-products are reported by manufacturer testing; values are provided in supplier documentation.

OTHER MATERIAL NOTES: MDI-based isocyanate is used as a reactive component for PIR foam. Supplied and quality-checked by the manufacturer; stored under standard conditions to maintain reactivity.

POLYMETHYLENE POLYPHENYL ISOCYANATE ID: **9016-87-9**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:51:47**

%: **50.0000 - 70.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Reagent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
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 - 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 - 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 2
MAM	Québec CSST - WHMIS 1988	Class D1A - Very toxic material causing immediate and serious toxic effects
MAM	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: dust, mist) - Category 2]
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]

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	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products

SUBSTANCE NOTES: Main isocyanate for PIR foam; residual monomers and by-products measured by supplier.

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:52:46**

%: **30.0000 - 50.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Reagent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
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]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - 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]
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]
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]
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
SKI	GHS - New Zealand	Skin sensitisation category 1
MAM	GHS - New Zealand	Acute inhalation 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	Québec CSST - WHMIS 1988	Class D1A - Very toxic material causing immediate and serious toxic effects
MAM	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]

MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: dust, mist) - Category 2]
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	GHS - Korea	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]

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	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

SUBSTANCE NOTES: Main isocyanate for PIR foam; residual monomers and by-products measured by supplier.

2,4'-DIPHENYLMETHANE DIISOCYANATE ID: **5873-54-1**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:54:13**

%: **5.0000 - 10.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Reagent**

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]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - 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 - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen
MAM	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]

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	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

SUBSTANCE NOTES: Minor MDI variant; residuals reported in supplier documentation.

HP – PIRGL-22P **%: 6.1300 - 6.7700**

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Other: Adhesive

RESIDUALS AND IMPURITIES NOTES: Residence and impurities were assessed by direct testing using appropriate methods.

OTHER MATERIAL NOTES: The materials containing the substance are listed in the same document.

POLYETHER POLYOL (PRIMARY CASRN IS 9082-00-2) ID: **67527-33-7**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:36:09**

%: **65.2000** GreenScreen: **LT-UNK** 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: Primary polyol in PIR foam; composition controlled by supplier; residuals reported in testing certificates.

1,3-BENZENEDIAMINE, AR-METHYL-, POLYMER WITH METHYLOXIRANE

ID: **63641-63-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:35:14**

%: **10.0000 - 25.0000** GreenScreen: **LT-UNK** 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: Main reactive backbone in PIR/polyol formulations.

1,2-ETHANEDIAMINE, POLYMER WITH 2-METHYLOXIRANE

ID: **25214-63-5**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-03-02 3:44:48**

%: **10.0000 - 20.0000** GreenScreen: **LT-UNK** 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:

N,N-DIMETHYLCYCLOHEXYLAMINE

ID: **98-94-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:33:17**

%: **1.0000 - 2.5000** GreenScreen: **LT-P1** 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
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single 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 - 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	GHS - Japan	H311 - Toxic in contact with skin [Acute Toxicity (dermal) - Category 3]
MAM	GHS - Japan	H301 - Toxic if swallowed [Acute Toxicity (oral) - Category 3]
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: vapor) - Category 2]

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

SUBSTANCE NOTES: Amine catalyst for polyurethane/PIR reaction; residuals reported by supplier.

1,2-ETHANEDIAMINE, N1-(2-(DIMETHYLAMINO)ETHYL)-N1,N2,N2-TRIMETHYL- ID: **3030-47-5**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:34:22**

%: **0.1000 - 1.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Catalyst**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - 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]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H311 - Toxic in contact with skin [Acute toxicity (dermal) - Category 3]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
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 - Australia	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]
SKI	GHS - New Zealand	Skin corrosion category 1B
MAM	GHS - Japan	H311 - Toxic in contact with skin [Acute Toxicity (dermal) - Category 3]
MAM	GHS - Australia	H311 - Toxic in contact with skin [Acute toxicity (dermal) - Category 3]
MAM	GHS - New Zealand	Acute dermal toxicity category 3
MAM	GHS - New Zealand	Acute oral toxicity category 3
SKI	GHS - Japan	H314 - Causes severe skin burns and eye damage [Skin corrosion / irritation - Category 1B]

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

SUBSTANCE NOTES: Amine catalyst to control reaction speed; residuals documented by the manufacturer.

HP-CPIR-5721-4P **%: 4.9800 - 5.5000**

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No

MATERIAL TYPE: Other: Polyol Component

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are measured and reported according to supplier testing; trace elements are captured in the provided certificates.

OTHER MATERIAL NOTES: Polyol blend for PIR foam production. Composition and chemical specifications are controlled by the manufacturer.

POLYETHER POLYOL (PRIMARY CASRN IS 9082-00-2) ID: **67527-33-7**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 4:25:39**

%: **65.2000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Reagent**

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: Primary polyol in PIR foam; composition controlled by supplier; residuals reported in testing certificates.

1,3-BENZENEDIAMINE, AR-METHYL-, POLYMER WITH METHYLOXIRANE

ID: **63641-63-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:46:17**

%: **10.0000 - 25.0000** GreenScreen: **LT-UNK** 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: Main reactive backbone in PIR/polyol formulations.

1,2-ETHANEDIAMINE, POLYMER WITH 2-METHYLOXIRANE

ID: **25214-63-5**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 4:22:43**

%: **10.0000 - 20.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Stabilizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

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

SUBSTANCE NOTES: Provides hydroxyl groups for PIR foam reaction; residuals reported by manufacturer.

N,N-DIMETHYLCYCLOHEXYLAMINE

ID: **98-94-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:42:36**

%: **1.0000 - 2.5000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Flame retardant**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single 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 - 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	GHS - Japan	H311 - Toxic in contact with skin [Acute Toxicity (dermal) - Category 3]
MAM	GHS - Japan	H301 - Toxic if swallowed [Acute Toxicity (oral) - Category 3]
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: vapor) - Category 2]

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

SUBSTANCE NOTES: Phosphorus-based, halogen-free additive; improves thermal stability; residuals documented by supplier.

1,2-ETHANEDIAMINE, N1-(2-(DIMETHYLAMINO)ETHYL)-N1,N2,N2-TRIMETHYL- ID: **3030-47-5**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:43:27**

%: **0.1000 - 1.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - 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]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H311 - Toxic in contact with skin [Acute toxicity (dermal) - Category 3]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
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 - Australia	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]
SKI	GHS - New Zealand	Skin corrosion category 1B
MAM	GHS - Japan	H311 - Toxic in contact with skin [Acute Toxicity (dermal) - Category 3]
MAM	GHS - Australia	H311 - Toxic in contact with skin [Acute toxicity (dermal) - Category 3]
MAM	GHS - New Zealand	Acute dermal toxicity category 3
MAM	GHS - New Zealand	Acute oral toxicity category 3
SKI	GHS - Japan	H314 - Causes severe skin burns and eye damage [Skin corrosion / irritation - Category 1B]

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

SUBSTANCE NOTES: Polyol modifier; residuals and impurities reported by manufacturer.

CYCLOPENTANE **%: 0.6200 - 0.6800**

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Other: Blowing Agent

RESIDUALS AND IMPURITIES NOTES: Residual impurities (e.g., moisture, stabilizers) are measured and reported by the supplier; values are included in certificates.

OTHER MATERIAL NOTES: Hydrocarbon blowing agent used for foam expansion in PIR panels. Supplied with purity specifications by the manufacturer; handled under standard safety protocols.

CYCLOPENTANE ID: **287-92-3**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:54:46**

%: **50.0000** 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: Hydrocarbon for foam expansion; residual stabilizers/moisture reported by supplier.

PENTANE ID: **109-66-0**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:55:16**

%: **50.0000** 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 2 - 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: Hydrocarbon for foam expansion; purity and residuals documented by supplier.

HP- CPIC-5064-P **%: 0.1520 - 0.1680**

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No

MATERIAL TYPE: Other: Polyol Component

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are determined by supplier analysis; reported values are based on manufacturer-provided certificates.

OTHER MATERIAL NOTES: Polyether polyol is used as the reactive component in PIR foam. Manufactured and quality-controlled by the supplier to achieve the target hydroxyl number.

WATER

ID: **7732-18-5**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:40:06**

%: **70.0000** GreenScreen: **BM-4** 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
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex IV listing due to intrinsic safety

SUBSTANCE NOTES: Used for foam expansion or processing; purity and residuals verified by supplier.

ETHYLENE GLYCOL

ID: **107-21-1**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:39:35**

%: **10.0000 - 20.0000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
DEV	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
DEV	CA EPA - Prop 65	Developmental - specific to chemical form or exposure route
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 - 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]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - 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: Low molecular weight glycol; residuals documented by manufacturer.

POTASSIUM 2-ETHYLHEXANOATE ID: **3164-85-0**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:38:40**

%: **10.0000 - 20.0000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Stabilizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 1B
DEV	EU - GHS (H-Statements) Annex 6 Table 3-1	H360D - May damage the unborn child [Reproductive toxicity - Category 1A or 1B]
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Australia	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]
DEV	GHS - Australia	H361 - Suspected of damaging fertility or the unborn child [Reproductive toxicity - Category 2]
REP	EU - REACH Annex XVII CMRs	Reproductive toxicants: Category 1B

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

SUBSTANCE NOTES: Used to stabilize polyol formulations; residuals measured by the supplier.

HP-CPIR-5840-5P **%: 0.0760 - 0.0840**

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Other: PIR Additive / Polyol Additive

RESIDUALS AND IMPURITIES NOTES: Residual substances and impurities are accounted for based on manufacturer testing; reported in supplier certificates.

OTHER MATERIAL NOTES: Flame retardant polyol additive for PIR foam systems. May include phosphorus-based halogen-free flame retardants; used to enhance thermal stability and fire resistance.

WATER ID: **7732-18-5**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:50:26**

%: **58.7500** GreenScreen: **BM-4** 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
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex IV listing due to intrinsic safety

SUBSTANCE NOTES: Used for foam expansion or processing; purity and residuals verified by supplier.

POLYETHER POLYOL (PRIMARY CASRN IS 9082-00-2)

ID: **67527-33-7**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:49:01**

%: **10.0000 - 25.0000** GreenScreen: **LT-UNK** 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: Primary polyol in PIR foam; composition controlled by supplier; residuals reported in testing certificates.

TRIETHYL PHOSPHATE

ID: **78-40-0**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:48:13**

%: **10.0000 - 25.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Flame retardant**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
EYE	GHS - New Zealand	Eye irritation category 2
MAM	GHS - Japan	H371 - May cause damage to organs [Specific target organs/systemic toxicity following single exposure - Category 2]
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]

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 Flame Retardants
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 v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Avoidance of Organohalogens and Functionally Related Chemical Classes of Concern

SUBSTANCE NOTES: Phosphorus-based, halogen-free additive; improves thermal stability; residuals documented by supplier.

PROPYLENE GLYCOL ID: **57-55-6**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-02-10 3:49:49**

%: **2.5000 - 10.0000** GreenScreen: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
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]

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

SUBSTANCE NOTES: Polyol modifier; residuals and impurities reported by manufacturer.

Section 3: 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	Inherently non-emitting source per LEED	
COMPLIANCE TYPE: Self-declaration **CERTIFIER/VERIFIER/TESTING LAB/AUDITOR:** None **COMPLIANCE DETAILS:** **COMPLIANCE SCOPE:** Product **APPLICABLE FACILITIES:** All **COMPLIANCE URL:** **COMPLIANCE NOTES:**	**ISSUE DATE:** 2026-02-10	**EXPIRY DATE:** No expiration

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

This product consists of pre-painted galvanized steel facings and a rigid PIR foam core made from polyol and isocyanate components, flame retardants, and blowing agents. All materials are manufactured under controlled conditions. Chemical compositions and residual substances are verified through manufacturer testing and documented in certificates. Trace elements, impurities, and residuals are reported based on actual supplier-provided analytical data. No other materials or additives are present in significant quantities. for more information, please visit: https://tsscgroup.com/pir-roof-wall-panels/#

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Technical Supplies & Services Co. LLC**
ADDRESS: **Dubai Investments Park – Phase 1**
Dubai, Dubai 77031
COUNTRY: **United Arab Emirates**

WEBSITE: **www.tsscgroup.com**
CONTACT NAME: **Shaik Mansoor**
TITLE: **Quality Manager (MR)**
PHONE: **+971 56 515 7581**
EMAIL: **mansoor@tsscuae.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 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.