

CLASSIFICATION: 03 45 00

created via: HPDC Online Builder

PRODUCT DESCRIPTION: THIS HPD COVERS PERMACON'S BOULEVARD PAVERS WITH AND WITHOUT GLASS POWDER MADE AT PERMACON'S SAINT-EUSTACHE PLANT. MORE SPECIFICALLY THIS HPD CONCERNS BOULEVARD PAVERS IN THE FOLLOWING COLORS: CINDER GREY, CHARCOAL, LIGHT CHARCOAL, SALMON, BROWN, RED, BEIGE GREY, AND BEIGE. IT ALSO INCLUDES THE ENTIRE RANGE OF SIZES AVAILABLE FOR THIS PRODUCT.

**Section 1: Summary**

**CONTENT INVENTORY**

Threshold per material <input checked="" type="radio"/> 100 ppm <input checked="" type="radio"/> 1,000 ppm <input type="radio"/> Per GHS SDS <input type="radio"/> Per OSHA MSDS <input checked="" type="radio"/> Other	Residuals and impurities considered in 6 of 8 materials <input checked="" type="radio"/> see Section 2: Material Notes <input checked="" type="radio"/> see Section 5: General Notes	Based on the selected Content Inventory Threshold:  Characterized..... Are the Percent Weight and Role provided for all substances? Yes No  Screened..... Are all substances screened using Priority Hazard Lists with results disclosed? Yes No  Identified..... Are all substances disclosed by Name (Specific or Generic) and Identifier? Yes No
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**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.

Number of Greenscreen BM-4/BM3 contents..... 0  
 Contents highest concern GreenScreen Benchmark or List translator Score..... LT-1  
 Nanomaterial..... No

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

AGGREGATES [ GRAVEL UNK ] ADMIXTURES [ TRIETHOXYOCTYLSILANE LT-UNK ]  
 ACETIC ACID, GLACIAL BM-2 | SKI | RES ALKENES, C14-16 ALPHA-, SULFONATED,  
 SODIUM SALTS LT-UNK POTASSIUM HYDROXIDE LT-UNK | MAM | SKI ETHANOL BM-2  
 | CAN | PHY | DEV ] BLENDED CEMENT [ PORTLAND CEMENT LT-UNK | CAN CALCIUM  
 SULFATE, 1\_2-HYDRATE, POWDER LT-UNK LIMESTONE; CALCIUM CARBONATE LT-  
 UNK CALCIUM OXIDE LT-UNK MAGNESIUM OXIDE LT-UNK SILICA FUME LT-UNK  
 QUARTZ LT-1 | CAN KAOLIN CLAY LT-UNK | CAN ] WHITE PORTLAND CEMENT [  
 PORTLAND CEMENT LT-UNK | CAN CALCIUM OXIDE LT-UNK QUARTZ LT-1 | CAN  
 CHROMIUM (VI) LT-1 | RES | CAN | DEV | REP | AQU | SKI | GEN ] GLASS POWDER [  
 SILICA, FUSED LT-1 | CAN ] RED PIGMENTS [ FERRIC OXIDE BM-2 | CAN LIMESTONE;  
 CALCIUM CARBONATE LT-UNK ] BLACK PIGMENT #2 [ IRON OXIDE LT-UNK | CAN  
 QUARTZ LT-1 | CAN ARSENIC LT-1 | MAM | AQU | DEV | CAN | PBT | END | MUL | GEN  
 ANTIMONY LT-1 | MAM | AQU | CAN CADMIUM LT-1 | MAM | CAN | AQU | REP | DEV | PBT  
 | GEN | PHY | MUL CHROMIUM LT-UNK | RES COPPER LT-UNK LEAD LT-1 | MAM |  
 AQU | DEV | REP | CAN | PBT | MUL | END | GEN MERCURY LT-1 | MAM | AQU | DEV | PBT  
 | REP | MUL | END | CAN | SKI NICKEL, OTHER INORGANIC COMPOUNDS UNK  
 SELENIUM LT-P1 | MAM | AQU | PBT | MUL | CAN ] YELLOW PIGMENT [ IRON  
 HYDROXIDE OXIDE YELLOW LT-UNK ]

**INVENTORY AND SCREENING NOTES:**

Boulevard pavers come in different sizes and colors that may affect their composition as described in this HPD. HPD has been built as a Material Content Inventory Display. Therefore, inventory thresholds are related to the composition of each material and not the final product. Permacon's products have been screened at a 1,000 ppm level so that all intentional materials and known potential residuals that could have existed in raw materials, at that level, have been disclosed.

**VOLATILE ORGANIC COMPOUND (VOC) CONTENT**

VOC Content data is not applicable for this product category.

**CERTIFICATIONS AND COMPLIANCE**

No certifications have been added to this HPD.

<input checked="" type="radio"/> Self-Published*	VERIFIER:	SCREENING DATE: December 1, 2016	EXPIRY DATE*: December 1, 2019
<input type="radio"/> Third Party Verified	VERIFICATION #:	RELEASE DATE: February 17, 2017	* or within 3 months of significant change in product contents
*See HPDC website for details			



## Section 2: Content in Descending Order of Quantity

This section lists materials in a product and the substances in each material based on the Inventory Threshold for each material. If residuals or impurities from the manufacturing or extraction processes are considered for a material, these are inventoried and characterized to the extent described in the Material and/or General Notes. Chemical substances are screened against the HPD Priority Hazard Lists for human and environmental health impacts. Screening is based on best available information; "Not Found" does not necessarily mean there is no potential hazard associated with the product or its contents. More information about Priority Hazard Lists and the GreenScreen can be found online: [www.hpd-collaborative.org](http://www.hpd-collaborative.org) and [www.greenscreenchemicals.org](http://www.greenscreenchemicals.org).

### AGGREGATES

%: 79.3000 - 81.9000

HPD URL:

Inventory Threshold: 1000 ppm

Residuals Considered: Yes

Material Notes: Aggregates consist of multiple crushed stones and sand. Range in composition comes from the variation among product dimensions.

#### GRAVEL

ID:

%: 100.0000

GS: UNK

RC: None

NANO: NO

ROLE: inert granular materials

#### HAZARDS:

#### AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Gravel is a synonym of both crushed stones and sand.

### ADMIXTURES

%: 0.0800 - 0.0900

HPD URL:

Inventory Threshold: Per GHS SDS

Residuals Considered: No

Material Notes: Four different kind of admixture are used. Since the admixtures are present in the final product at a total weight % of less than 0.1%, the information based on the safety data sheet is sufficient to meet the HPD Open Standard requirements. One of the four admixtures is not disclosed since the product does not contain any components classified as hazardous under the referenced regulation. Range in composition comes from the variation among product colors and dimensions.

#### TRIETHOXYOCTYLSILANE

ID: 2943-75-1

%: 7.5000 - 15.0000

GS: LT-UNK

RC: None

NANO: NO

ROLE: Admixture ingredient

#### HAZARDS:

#### AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Admixture B, hazardous substance #1

#### ACETIC ACID, GLACIAL

ID: 64-19-7

%: 0.2500 - 1.2500

GS: BM-2

RC: None

NANO: NO

ROLE: Admixture ingredient

#### HAZARDS:

#### AGENCY(IES) WITH WARNINGS:

SKIN IRRITATION

EU - R-phrases

R35 - Causes severe burns

RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rr&Rs) - irritant-induced & sensitizer-induced
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SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
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SUBSTANCE NOTES: Admixture C, hazardous substance #1

**ALKENES, C14-16 ALPHA-, SULFONATED, SODIUM SALTS**

ID: 68439-57-6

%: 0.1250 - 0.3750	GS: LT-UNK	RC: None	NANO: NO	ROLE: Admixture ingredient
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**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Admixture A, hazardous substance #1

**POTASSIUM HYDROXIDE**

ID: 1310-58-3

%: 0.1250 - 0.3750	GS: LT-UNK	RC: None	NANO: NO	ROLE: Admixture ingredient
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**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

MAMMALIAN

EU - R-phrases

R22 - Harmful if Swallowed

SKIN IRRITATION

EU - R-phrases

R35 - Causes severe burns

SKIN IRRITATION

EU - GHS (H-Statements)

H314 - Causes severe skin burns and eye damage

SUBSTANCE NOTES: Admixture A, hazardous substance #2

**ETHANOL**

ID: 64-17-5

%: 0.0250 - 0.2500	GS: BM-2	RC: None	NANO: NO	ROLE: Admixture ingredient
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**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

CANCER

IARC

Group 1 - Agent is Carcinogenic to humans

CANCER

CA EPA - Prop 65

Carcinogen - specific to chemical form or exposure route

PHYSICAL HAZARD (REACTIVE)

EU - GHS (H-Statements)

H225 - Highly flammable liquid and vapour

CANCER

MAK

Carcinogen Group 5 - Genotoxic carcinogen with very slight risk under MAK/BAT levels

SUBSTANCE NOTES: Admixture B, hazardous substance #2

**BLENDED CEMENT**

%: 0.0000 - 20.0000

HPD URL:

Inventory Threshold: 1000 ppm

Residuals Considered: Yes

Material Notes: Range in composition comes from the variation among product colors and dimensions. Manufacturer's statement: Blended Cement has a variable composition depending upon the cementitious products produced in the cement kiln. Small amounts of naturally occurring, but potentially harmful, chemical compounds might be detected during chemical analysis. These trace compounds might include free crystalline silica, potassium and sodium compounds; heavy metals including cadmium, chromium, nickel and lead; and organic compounds. Other trace constituents may include calcium oxide (also known as free lime or quick lime).

**PORTLAND CEMENT**

ID: 65997-15-1

%: 50.0000 - 90.0000

GS: LT-UNK

RC: None

NANO: NO

ROLE: Binding ingredient

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

CANCER

MAK

Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: See Material notes

**CALCIUM SULFATE, 1\_2-HYDRATE, POWDER**

ID: 7778-18-9

%: 1.0000 - 10.0000

GS: LT-UNK

RC: None

NANO: NO

ROLE: Binding ingredient

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material notes

**LIMESTONE; CALCIUM CARBONATE**

ID: 1317-65-3

%: 0.0000 - 20.0000

GS: LT-UNK

RC: None

NANO: NO

ROLE: Binding ingredient

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material notes

**CALCIUM OXIDE**

ID: 1305-78-8

%: 0.0000 - 2.0000

GS: LT-UNK

RC: None

NANO: NO

ROLE: Binding ingredient

**HAZARDS:****AGENCY(IES) WITH WARNINGS:**

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material notes

**MAGNESIUM OXIDE**

ID: 1309-48-4

%: 0.0000 - 15.0000

GS: LT-UNK

RC: None

NANO: NO

ROLE: Binding ingredient

**HAZARDS:****AGENCY(IES) WITH WARNINGS:**

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material notes

**SILICA FUME**

ID: 69012-64-2

%: 0.0000 - 40.0000

GS: LT-UNK

RC: None

NANO: NO

ROLE: Binding ingredient

**HAZARDS:****AGENCY(IES) WITH WARNINGS:**

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Silicon Dioxide

**QUARTZ**

ID: 14808-60-7

%: 0.0000 - 1.5000

GS: LT-1

RC: None

NANO: NO

ROLE: Binding ingredient

**HAZARDS:****AGENCY(IES) WITH WARNINGS:**

CANCER

IARC

Group 1 - Agent is Carcinogenic to humans

CANCER

US CDC - Occupational Carcinogens

Occupational Carcinogen

CANCER

CA EPA - Prop 65

Carcinogen - specific to chemical form or exposure route

CANCER

IARC

Group 1: Agent is carcinogenic to humans - inhaled from occupational sources

CANCER

US NIH - Report on Carcinogens

Known to be Human Carcinogen (respirable size - occupational setting)

CANCER

MAK

Carcinogen Group 1 - Substances that cause cancer in man

SUBSTANCE NOTES: Crystalline Silica

**KAOLIN CLAY**

ID: 1332-58-7

%: 0.0000 - 15.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Binding ingredient
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**HAZARDS:****AGENCY(IES) WITH WARNINGS:**

CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
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SUBSTANCE NOTES: Natural Aluminosilicate

**WHITE PORTLAND CEMENT**

%: 0.0000 - 20.0000

HPD URL:

Inventory Threshold: 1000 ppm

Residuals Considered: Yes

Material Notes: Range in composition comes from the variation among product colors and dimensions. Manufacturer's statement: Portland cement also contains gypsum, limestone and magnesium oxide in various concentrations. However, because these components are not classifiable as a hazard under Title 29 Code of Federal Regulations 1910.1200, they are required to be listed in this section. Gypsum 2-6% ; Limestone 0-5% ; Magnesium oxide 0.5-2%. Any concentration shown as a range is to protect confidentiality or is due to process variation.

**PORTLAND CEMENT**

ID: 65997-15-1

%: 100.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Binding ingredient
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**HAZARDS:****AGENCY(IES) WITH WARNINGS:**

CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
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SUBSTANCE NOTES: See Material notes

**CALCIUM OXIDE**

ID: 1305-78-8

%: Impurity/Residual	GS: LT-UNK	RC: None	NANO: NO	ROLE: Impurity/Residual
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**HAZARDS:****AGENCY(IES) WITH WARNINGS:**

None Found	No warnings found on HPD Priority lists
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SUBSTANCE NOTES: See Material notes

**QUARTZ**

ID: 14808-60-7

%: Impurity/Residual	GS: LT-1	RC: None	NANO: NO	ROLE: Impurity/Residual
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**HAZARDS:****AGENCY(IES) WITH WARNINGS:**

CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
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CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
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CANCER	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CANCER	IARC	Group 1: Agent is carcinogenic to humans - inhaled from occupational sources
CANCER	US NIH - Report on Carcinogens	Known to be Human Carcinogen (respirable size - occupational setting)
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man

SUBSTANCE NOTES: See Material notes

**CHROMIUM (VI)**

ID: 18540-29-9

%: Impurity/Residual	GS: LT-1	RC: None	NANO: NO	ROLE: Impurity/Residual
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**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
CANCER	US EPA - IRIS Carcinogens	(1996) Known/likely human Carcinogen
CANCER	US EPA - IRIS Carcinogens	(1986) Group A - Human Carcinogen
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
REPRODUCTIVE	CA EPA - Prop 65	Developmental Toxicity - Female
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
SKIN IRRITATION	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
CANCER	EU - GHS (H-Statements)	H350i - May cause cancer by inhalation
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization
GENE MUTATION	MAK	Germ Cell Mutagen 2

SUBSTANCE NOTES: Hexavalent chromium

Inventory Threshold: 1000 ppm

Residuals Considered: Yes

Material Notes: Alternate material to portland cement. Glass powder is present in Boulevard pavers with glass powder. Glass powder replaces 10% of original portland cement input. Range in composition comes from the variation among product dimensions.

**SILICA, FUSED**

ID: 60676-86-0

%: 100.0000	GS: LT-1	RC: PostC	NANO: NO	ROLE: Supplementary Cementing Material
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**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
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SUBSTANCE NOTES: Approximation for recycled glass transformed into powder.

**RED PIGMENTS**

%: 0.0000 - 0.6000

HPD URL:

Inventory Threshold: 1000 ppm

Residuals Considered: Yes

Material Notes: Two kinds of red pigments are present in Boulevard pavers depending on the product color: light red and dark red. Range in composition comes from the variation among product colors and dimensions.

**FERRIC OXIDE**

ID: 1309-37-1

%: 92.0000 - 100.0000	GS: BM-2	RC: None	NANO: NO	ROLE: Pigment: ingredient #1
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**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
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SUBSTANCE NOTES: C.I. Pigment Red 101

**LIMESTONE; CALCIUM CARBONATE**

ID: 1317-65-3

%: 0.0000 - 5.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Pigment: ingredient #2
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**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

None Found	No warnings found on HPD Priority lists
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SUBSTANCE NOTES: See Material notes

**BLACK PIGMENT #2**

%: 0.0000 - 0.4000

HPD URL:

Inventory Threshold: 100 ppm

Residuals Considered: Yes

Material Notes: Range in composition comes from the variation among product colors and dimensions. Manufacturer's statement: The values for typical contents and trace metals are provided as general information only. They are approximate values for reference and not specifications utilized in our standard QC procedures for color and consistency.

**IRON OXIDE**

ID: 1317-61-9



%: 95.0000 - 100.0000

GS: LT-UNK

RC: None

NANO: NO

ROLE: Coloring media

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

CANCER

MAK

Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: C.I. Pigment Black 11

**QUARTZ**

ID: 14808-60-7

%: 0.0000 - 0.1000

GS: LT-1

RC: None

NANO: NO

ROLE: Pigment: ingredient #2

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

CANCER

IARC

Group 1 - Agent is Carcinogenic to humans

CANCER

US CDC - Occupational Carcinogens

Occupational Carcinogen

CANCER

CA EPA - Prop 65

Carcinogen - specific to chemical form or exposure route

CANCER

IARC

Group 1: Agent is carcinogenic to humans - inhaled from occupational sources

CANCER

US NIH - Report on Carcinogens

Known to be Human Carcinogen (respirable size - occupational setting)

CANCER

MAK

Carcinogen Group 1 - Substances that cause cancer in man

SUBSTANCE NOTES: Crystalline silica

**ARSENIC**

ID: 7440-38-2

%: Impurity/Residual

GS: LT-1

RC: None

NANO: NO

ROLE: Impurity/Residual

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

MAMMALIAN

EU - R-phrases

R23 - Toxic by Inhalation (gas, vapour, dust/mist)

MAMMALIAN

EU - R-phrases

R25 - Toxic if Swallowed

ACUTE AQUATIC

EU - R-phrases

R50 - Very Toxic to Aquatic Organisms

DEVELOPMENTAL

G&L - Neurotoxic Chemicals

Developmental Neurotoxicant

CANCER

US EPA - IRIS Carcinogens

(1986) Group A - Human Carcinogen

CANCER

IARC

Group 1 - Agent is Carcinogenic to humans

CANCER

CA EPA - Prop 65

Carcinogen

CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
MAMMALIAN	EU - GHS (H-Statements)	H301 - Toxic if swallowed
MAMMALIAN	EU - GHS (H-Statements)	H331 - Toxic if inhaled
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
GENE MUTATION	MAK	Germ Cell Mutagen 3a

SUBSTANCE NOTES: As < 10 ppm

**ANTIMONY**

ID: 7440-36-0

%: Impurity/Residual      GS: LT-1      RC: None      NANO: NO      ROLE: Impurity/Residual

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

MAMMALIAN	EU - R-phrases	R20 - Harmful by Inhalation (gas or vapor or dust/mist)
MAMMALIAN	EU - R-phrases	R22 - Harmful if Swallowed
ACUTE AQUATIC	EU - R-phrases	R51 - Toxic to Aquatic Organisms
CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man

SUBSTANCE NOTES: Sb < 15 ppm

**CADMIUM**

ID: 7440-43-9

%: Impurity/Residual      GS: LT-1      RC: None      NANO: NO      ROLE: Impurity/Residual

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

MAMMALIAN	EU - R-phrases	R23 - Toxic by Inhalation (gas, vapour, dust/mist)
MAMMALIAN	EU - R-phrases	R25 - Toxic if Swallowed

MAMMALIAN	EU - R-phrases	R26 - Very Toxic by Inhalation
CANCER	EU - R-phrases	R45 - May cause cancer
ORGAN TOXICANT	EU - R-phrases	R48: Danger of serious damage to health by prolonged exposure.
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
REPRODUCTIVE	EU - R-phrases	R62 - Possible risk of impaired fertility
DEVELOPMENTAL	EU - R-phrases	R63 - Possible risk of harm to the unborn child
CANCER	US EPA - IRIS Carcinogens	(1986) Group B1 - Probable human Carcinogen
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
PBT	WA DoE - PBT	PBT
GENE MUTATION	EU - R-phrases	R68 - May cause irreversible effects
REPRODUCTIVE	CA EPA - Prop 65	Developmental Toxicity - Male
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens	Known to be a human Carcinogen
CANCER	EU - SVHC Authorisation List	Carcinogenic - Candidate list
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air
MAMMALIAN	EU - GHS (H-Statements)	H330 - Fatal if inhaled
GENE MUTATION	EU - GHS (H-Statements)	H341 - Suspected of causing genetic defects
CANCER	EU - GHS (H-Statements)	H350 - May cause cancer
REPRODUCTIVE	EU - GHS (H-Statements)	H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure

CANCER	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
GENE MUTATION	MAK	Germ Cell Mutagen 3a
SUBSTANCE NOTES: Cd < 1 ppm		

**CHROMIUM**

ID: 7440-47-3

%: Impurity/Residual	GS: LT-UNK	RC: None	NANO: NO	ROLE: Impurity/Residual
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**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
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SUBSTANCE NOTES: Cr (III) < 350 ppm

**COPPER**

ID: 7440-50-8

%: Impurity/Residual	GS: LT-UNK	RC: None	NANO: NO	ROLE: Impurity/Residual
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**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

None Found	No warnings found on HPD Priority lists
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SUBSTANCE NOTES: Cu < 300 ppm

**LEAD**

ID: 7439-92-1

%: Impurity/Residual	GS: LT-1	RC: None	NANO: NO	ROLE: Impurity/Residual
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**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

MAMMALIAN	EU - R-phrases	R20 - Harmful by Inhalation (gas or vapor or dust/mist)
MAMMALIAN	EU - R-phrases	R22 - Harmful if Swallowed
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms

DEVELOPMENTAL	EU - R-phrases	R61 - May cause harm to the unborn child
REPRODUCTIVE	EU - R-phrases	R62 - Possible risk of impaired fertility
DEVELOPMENTAL	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant
CANCER	US EPA - IRIS Carcinogens	(1986) Group B2 - Probable human Carcinogen
CANCER	IARC	Group 2a - Agent is probably Carcinogenic to humans
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
PBT	WA DoE - PBT	PBT
REPRODUCTIVE	CA EPA - Prop 65	Developmental Toxicity - Female
REPRODUCTIVE	CA EPA - Prop 65	Developmental Toxicity - Male
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
PBT	US EPA - Priority PBTs (PPT)	Priority PBT
PBT	US EPA - Toxics Release Inventory PBTs	PBT
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1
DEVELOPMENTAL	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
REPRODUCTIVE	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Reproductive Toxicity
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
DEVELOPMENTAL	EU - GHS (H-Statements)	H360Df - May damage the unborn child. Suspected of damaging fertility
REPRODUCTIVE	EU - GHS (H-Statements)	H360Fd - May damage fertility. Suspected of damaging the unborn child
DEVELOPMENTAL	EU - GHS (H-Statements)	H362 - May cause harm to breast-fed children
REPRODUCTIVE	EU - REACH Annex XVII CMRs	Toxic to Reproduction Category 1 - Substances known to impair fertility or cause Developmental Toxicity in humans
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant

ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
GENE MUTATION	MAK	Germ Cell Mutagen 3a
REPRODUCTIVE	EU - Annex VI CMRs	Reproductive Toxicity - Category 1A

SUBSTANCE NOTES: Pb < 5 ppm

**MERCURY**

ID: 7439-97-6

%: Impurity/Residual	GS: LT-1	RC: None	NANO: NO	ROLE: Impurity/Residual
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**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

MAMMALIAN	EU - R-phrases	R23 - Toxic by Inhalation (gas, vapour, dust/mist)
MAMMALIAN	EU - R-phrases	R26 - Very Toxic by Inhalation
MAMMALIAN	EU - R-phrases	R27 - Very Toxic in Contact with Skin
MAMMALIAN	EU - R-phrases	R28 - Very Toxic if Swallowed
ORGAN TOXICANT	EU - R-phrases	R48: Danger of serious damage to health by prolonged exposure.
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
DEVELOPMENTAL	EU - R-phrases	R61 - May cause harm to the unborn child
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
PBT	US EPA - Priority PBTs (PPT)	Priority PBT
PBT	US EPA - Toxics Release Inventory PBTs	PBT
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
MAMMALIAN	EU - GHS (H-Statements)	H300 - Fatal if swallowed
MAMMALIAN	EU - GHS (H-Statements)	H310 - Fatal in contact with skin
MAMMALIAN	EU - GHS (H-Statements)	H330 - Fatal if inhaled
DEVELOPMENTAL	EU - GHS (H-Statements)	H360D - May damage the unborn child
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure

REPRODUCTIVE	EU - REACH Annex XVII CMRs	Toxic to Reproduction Category 2 - Substances which should be regarded as if they impair fertility or cause Developmental Toxicity in humans
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization
REPRODUCTIVE	EU - Annex VI CMRs	Reproductive Toxicity - Category 1B

SUBSTANCE NOTES: Hg < 1 ppm

**NICKEL, OTHER INORGANIC COMPOUNDS**

ID:

%: Impurity/Residual	GS: UNK	RC: None	NANO: NO	ROLE: Impurity/Residual
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**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Approximation for Elemental Nickel: Ni < 50 ppm

**SELENIUM**

ID: 7782-49-2

%: Impurity/Residual	GS: LT-P1	RC: None	NANO: NO	ROLE: Impurity/Residual
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**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

MAMMALIAN	EU - R-phrases	R23 - Toxic by Inhalation (gas, vapour, dust/mist)
MAMMALIAN	EU - R-phrases	R25 - Toxic if Swallowed
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
MAMMALIAN	EU - GHS (H-Statements)	H301 - Toxic if swallowed
MAMMALIAN	EU - GHS (H-Statements)	H331 - Toxic if inhaled
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

CANCER

MAK

Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: Se < 2 ppm

**YELLOW PIGMENT**

**%: 0.0000 - 0.1900**

**HPD URL:**

Inventory Threshold: Other

Residuals Considered: No

Material Notes: No information concerning hazardous ingredients was given by the supplier. However, we know the chemical structure of yellow pigment: FeO(OH). So this substance was used as an approximation for the entire yellow pigment composition. Range in composition comes from the variation among product colors and dimensions.

**IRON HYDROXIDE OXIDE YELLOW**

ID: 20344-49-4

%: 100.0000

GS: LT-UNK

RC: None

NANO: NO

ROLE: Yellow pigment

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: iron(III) oxide-hydroxide



**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.



**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.



**Section 5: General Notes**





**MANUFACTURER INFORMATION**

MANUFACTURER: Permacon

CONTACT NAME: Blaise Perron

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Canada

TITLE: Technical support engineer

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**KEY**

**OSHA MSDS** Occupational Safety and Health Administration Material Safety Data Sheet

**GHS SDS** Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Hazard Types

**AQU** Aquatic toxicity

**GLO** Global warming

**PHY** Physical Hazard (reactive)

**CAN** Cancer

**MAM** Mammalian/systemic/organ toxicity

**REP** Reproductive toxicity

**DEV** Developmental toxicity

**MUL** Multiple hazards

**RES** Respiratory sensitization

**END** Endocrine activity

**NEU** Neurotoxicity

**SKI** Skin sensitization/irritation/corrosivity

**EYE** Eye irritation/corrosivity

**OZO** Ozone depletion

**LAN** Land Toxicity

**GEN** Gene mutation

**PBT** Persistent Bioaccumulative Toxic

**NF** Not found on Priority Hazard Lists

GreenScreen (GS)

**BM-4** Benchmark 4 (prefer-safer chemical)

**LT-P1** List Translator Possible Benchmark 1

**BM-3** Benchmark 3 (use but still opportunity for improvement) **BM-2**  
Benchmark 2 (use but search for safer substitutes)

**LT-1** List Translator Likely Benchmark 1

**BM-1** Benchmark 1 (avoid - chemical of high concern)

**LT-UNK** List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)

**BM-U** Benchmark Unspecified (insufficient data to benchmark)

**UNK** Unknown (no data on List Translator Lists)

Recycled Types

**PreC** Preconsumer (Post-Industrial)

**PostC** Postconsumer

**Both** Both Preconsumer and Postconsumer

**Unk** Inclusion of recycled content is unknown

**None** Does not include recycled content

Other

**Nano** Composed of nanoscale particles or nanotechnology

Declaration Level

**Self-declared** Manufacturer's self-declaration (First Party)

**Independent Lab** Manufacturer's self-declaration using results from an independent lab

**Second Party** Verification by trade association or other interested party

**Third Party** Verification by independent certifier

**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 does not provide an assessment of health impacts throughout the product life cycle. It does not provide an assessment of exposure or risk associated with product handling or use. It also does not address potential health impacts of: (i) substances used or created during the manufacturing process unless they remain in the final product, or (ii) substances created after the product is delivered for end use (e.g., if the product burns, degrades, or otherwise changes chemical composition).

The HPD Open Standard was created and is maintained and evolved by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry. The HPD Collaborative is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

A disclosure completed in compliance with the HPD Open Standard is referred to as a "Health Product Declaration," or "HPD." 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 Open Standard noted.