

CLASSIFICATION: 03302 Concrete Ready Mix

PRODUCT DESCRIPTION: This ready-mix concrete manufactured by Holcim Mexico, S.A. de C.V. has the following specifications: Weight of the mixture [kg / m3] 2367, Resistance to 28 days [MPa] 40 (Conversion 1 Mpa= 10.1972 kg/cm2), Nominal Revene 22 +/- 3 cm, Nominal air content [%] 1.5, Water ratio in cementing material 0.34, Maximum size Gravel 1 limestone [mm] 20, Size of river sand [mm] 0-0.05, Shrink Limit [%] @ 56 days 0.045, UNSPSC Code 30111500 Ready Mix Concrete. This concrete is rated for structural construction and can be made at either three plants located onsite NAICM or at the Los Reyes plant. This HPD is of the ready-mix concrete, mixture HMX C1, only and does not include any sealers or other concrete accessory products.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
- Basic Method

Threshold Disclosed Per

- Material
- Product

Threshold level

- 100 ppm
- 1,000 ppm
- Per GHS SDS
- Per OSHA MSDS
- Other

Residuals/Impurities

Residuals/Impurities Considered in 6 of 6 Materials

- Explanation(s) provided for Residuals/Impurities?
- Yes
 - No

Are All Substances Above the Threshold Indicated:

Characterized Yes No
Percent Weight and Role Provided?

Screened Yes No
Using Priority Hazard Lists with Results Disclosed?

Identified Yes No
Name and Identifier Provided?

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.

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

GRAVEL [GRAVEL (GRAVEL) NoGS MANGANESE (MANGANESE) LT-P1 |
END | MUL | REP **VANADIUM (VANADIUM) LT-1 |** MUL | CAN | GEN **NICKEL (NICKEL) LT-1 |** MAM | CAN | SKI | AQU | RES | MUL **COBALT (COBALT) LT-1 |** RES | SKI | CAN | MUL | GEN] **HMX C1 [RIVER SAND NoGS WATER (WATER) BM-4 SILICA FUME (SILICA FUME) LT-P1] PORTLAND CEMENT [PORTLAND CEMENT (PORTLAND CEMENT) LT-P1 |** END | CAN **CHROMIUM (III) COMPOUNDS (CHROMIUM (III) COMPOUNDS) LT-UNK |** RES | SKI] **FLY ASH [MANGANESE (MANGANESE) LT-P1 |** END | MUL | REP **VANADIUM (VANADIUM) LT-1 |** MUL | CAN | GEN **ARSENIC (ARSENIC) LT-1 |** MAM | AQU | DEL | CAN | PBT | END | MUL | GEN **NICKEL (NICKEL) LT-1 |** MAM | CAN | SKI | AQU | RES | MUL **LEAD (LEAD) LT-1 |** MAM | AQU | DEL | REP | CAN | PBT | MUL | END | GEN **COBALT (COBALT) LT-1 |** RES | SKI | CAN | MUL | GEN] **UNDISCLOSED [CARBOXYLIC ACIDS, DI-, C4-11 (CARBOXYLIC ACIDS, DI-, C4-11) NoGS WATER (WATER) BM-4 SIMETHICONE (SIMETHICONE) LT-UNK] EUCON WO [WATER (WATER) BM-4 SODIUM HYDROXIDE (SODIUM HYDROXIDE) LT-P1 |** SKI | PHY **(NITRILOTRIS(METHYLENE))TRIPHOSPHONIC ACID ((NITRILOTRIS(METHYLENE))TRIPHOSPHONIC ACID) LT-UNK SODIUM GLUCONATE (SODIUM GLUCONATE) LT-UNK 1,4-DIOXANE (1,4-DIOXANE) LT-1 |** EYE | CAN | MUL | PHY **SODIUM O-PHENYLPHENATE (SODIUM O-PHENYLPHENATE) LT-1 |** MAM | SKI | EYE | AQU | CAN | MUL **DAZOMET (DAZOMET) BM-2 |** MAM | EYE | AQU | MUL **FORMALDEHYDE (FORMALDEHYDE) LT-1 |** MAM | SKI | CAN | RES | GEN | MUL | END]

Number of Greenscreen BM-4/BM3 contents ... 3
Contents highest concern GreenScreen Benchmark or List translator Score ... LT-1
Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

All materials were screened for this HPD with the exception of River Sand. River sand is a Geological Material considered a Special Condition by HPDC. Reporting Special Condition materials are still under development by HPDC. This Special Condition has caused the Screening of Materials pre-check to fail. At the time that HPDC has updated the handling of Geological Material Holcim Mexico will update the HPD to reflect those changes.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

Multi-attribute: Environmental Product Declaration (EPD) by Labeling

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

- Yes
- No

PREPARER: **Self-Prepared**

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2017-10-05

PUBLISHED DATE: 2018-05-11

EXPIRY DATE: 2020-10-05



Section 2: Content in Descending Order of Quantity

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-standard

GRAVEL

#: 40.0000 - 50.0000

HPD URL:

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities Noted and Recorded according to the Quartz Database for common building materials (REady Mix Concrete) <http://www.quartzproject.org/p/CP170-a03#cp>

OTHER MATERIAL NOTES:

GRAVEL (GRAVEL)

ID: Not registered

#: 100.0000 GS: NoGS RC: UNK NANO: No ROLE: Aggregate

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

MANGANESE (MANGANESE)

ID: 7439-96-5

#: Impurity/Residual GS: LT-P1 RC: UNK NANO: No ROLE: Impurity/Residual

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

REPRODUCTIVE

Japan - GHS

Toxic to reproduction - Category 1B

SUBSTANCE NOTES: Per Quartz <http://www.quartzproject.org/p/CP170-a03#cp>

VANADIUM (VANADIUM)

ID: 7440-62-2

#: Impurity/Residual GS: LT-1 RC: UNK NANO: No ROLE: Impurity/Residual

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 3 - Severe Hazard to Waters

CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
GENE MUTATION	MAK	Germ Cell Mutagen 2

SUBSTANCE NOTES: Per Quartz <http://www.quartzproject.org/p/CP170-a03#cp>

NICKEL (NICKEL)

ID: 7440-02-0

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
%: Impurity/Residual	GS: LT-1	RC: UNK NANO: No ROLE: Impurity/Residual
MAMMALIAN	EU - R-phrases	R23 - Toxic by Inhalation (gas, vapour, dust/mist)
CANCER	EU - R-phrases	R40 - Limited Evidence of Carcinogenic Effects
SKIN SENSITIZE	EU - R-phrases	R43 - May cause sensitization by skin contact
ORGAN TOXICANT	EU - R-phrases	R48: Danger of serious damage to health by prolonged exposure.
ACUTE AQUATIC	EU - R-phrases	R52 - Harmful to Aquatic Organisms
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES: Per Quartz <http://www.quartzproject.org/p/CP170-a03#cp>

COBALT (COBALT)

ID: 7440-48-4

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS: AGENCY(IES) WITH WARNINGS:

RESPIRATORY	EU - R-phrases	R42 - May cause sensitization by inhalation
SKIN SENSITIZE	EU - R-phrases	R43 - May cause sensitization by skin contact
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
RESPIRATORY	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
GENE MUTATION	MAK	Germ Cell Mutagen 3a

SUBSTANCE NOTES: Per Quartz <http://www.quartzproject.org/p/CP170-a03#cp>

HMX C1

#: 26.0000 - 47.0000

HPD URL:

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities were considered and checked against the Quartz database for common building materials- Ready-mix concrete <http://www.quartzproject.org/p/CP170-a03#cp>

OTHER MATERIAL NOTES:

RIVER SAND

ID: Not Registered

#: 20.0000 - 30.0000

GS: NoGS

RC: UNK

NANO: No

ROLE: Aggregate

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: River sand is a Geological Material considered a Special Condition by HPDC. Reporting Special Condition materials are still under development by HPDC.

WATER (WATER)

ID: 7732-18-5

%: **5.0000 - 10.0000**

GS: **BM-4**

RC: **None**

NANO: **No**

ROLE: **Hydration**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

SILICA FUME (SILICA FUME)

ID: **69012-64-2**

%: **1.0000 - 2.0000**

GS: **LT-P1**

RC: **None**

NANO: **No**

ROLE: **Strengtheners**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

PORTLAND CEMENT

%: **10.0000 - 15.0000**

HPD URL:

PRODUCT THRESHOLD: **1000 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **Yes**

RESIDUALS AND IMPURITIES NOTES: **All residuals and Impurities per the Quartz Database for common building materials- Ready-mix concrete <http://www.quartzproject.org/p/CP170-a03#cp>**

OTHER MATERIAL NOTES:

PORTLAND CEMENT (PORTLAND CEMENT)

ID: **65997-15-1**

%: **100.0000**

GS: **LT-P1**

RC: **PreC**

NANO: **No**

ROLE: **Cement**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

CANCER

MAK

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

SUBSTANCE NOTES: **Post Industrial Recycled Content 90.24 kg/m3**

CHROMIUM (III) COMPOUNDS (CHROMIUM (III) COMPOUNDS)

ID: **Not registered**

%: **Impurity/Residual**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

RESPIRATORY

AOEC - Asthmagens

Asthmagen (ARs) - sensitizer-induced - inhalable forms only

SKIN SENSITIZE

MAK

Sensitizing Substance Sh - Danger of skin sensitization

FLY ASH

%: 2.0000 - 5.0000

HPD URL:

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities per the Quartz Database for common building materials- Ready Mix Concrete <http://www.quartzproject.org/p/CP170-a03#cp>

OTHER MATERIAL NOTES:

MANGANESE (MANGANESE)

ID: 7439-96-5

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

REPRODUCTIVE

Japan - GHS

Toxic to reproduction - Category 1B

SUBSTANCE NOTES: Per Quartz <http://www.quartzproject.org/p/CP170-a03#cp>

VANADIUM (VANADIUM)

ID: 7440-62-2

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 3 - Severe Hazard to Waters

CANCER

MAK

Carcinogen Group 2 - Considered to be carcinogenic for man

GENE MUTATION

MAK

Germ Cell Mutagen 2

SUBSTANCE NOTES: Per Quartz <http://www.quartzproject.org/p/CP170-a03#cp>

ARSENIC (ARSENIC)

ID: 7440-38-2

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** 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
CANCER	Korea - GHS	Carcinogenicity - Category 1 [H350 - May cause cancer]
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens
CANCER	Japan - GHS	Carcinogenicity - Category 1A
GENE MUTATION	MAK	Germ Cell Mutagen 3a
CANCER	Australia - GHS	H350 - May cause cancer

SUBSTANCE NOTES: Per Quartz <http://www.quartzproject.org/p/CP170-a03#cp>

NICKEL (NICKEL)

ID: 7440-02-0

%: Impurity/Residual HAZARDS:	GS: LT-1 AGENCY(IES) WITH WARNINGS:	RC: UNK	NANO: No	ROLE: Impurity/Residual
MAMMALIAN	EU - R-phrases	R23 - Toxic by Inhalation (gas, vapour, dust/mist)		
CANCER	EU - R-phrases	R40 - Limited Evidence of Carcinogenic Effects		
SKIN SENSITIZE	EU - R-phrases	R43 - May cause sensitization by skin contact		
ORGAN TOXICANT	EU - R-phrases	R48: Danger of serious damage to health by prolonged exposure.		
ACUTE AQUATIC	EU - R-phrases	R52 - Harmful to Aquatic Organisms		
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans		
CANCER	IARC	Group 2b - Possibly carcinogenic to humans		

CANCER	CA EPA - Prop 65	Carcinogen
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES: Per Quartz <http://www.quartzproject.org/p/CP170-a03#cp>

LEAD (LEAD)

ID: 7439-92-1

HAZARDS:	AGENCY(IES) WITH WARNINGS:
%: Impurity/Residual	GS: LT-1 RC: UNK NANO: No ROLE: Impurity/Residual
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 Reproductive Toxicity - Female
REPRODUCTIVE	CA EPA - Prop 65 Reproductive 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. May damage 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
REPRODUCTIVE	New Zealand - GHS	6.8A - Known or presumed human reproductive or developmental toxicants
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1A
GENE MUTATION	MAK	Germ Cell Mutagen 3a
REPRODUCTIVE	EU - Annex VI CMRs	Reproductive Toxicity - Category 1A

SUBSTANCE NOTES: Per Quartz <http://www.quartzproject.org/p/CP170-a03#cp>

COBALT (COBALT)

ID: 7440-48-4

#: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

RESPIRATORY	EU - R-phrases	R42 - May cause sensitization by inhalation
SKIN SENSITIZE	EU - R-phrases	R43 - May cause sensitization by skin contact
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen

CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
RESPIRATORY	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
GENE MUTATION	MAK	Germ Cell Mutagen 3a

SUBSTANCE NOTES: Per Quartz <http://www.quartzproject.org/p/CP170-a03#cp>

UNDISCLOSED

%: 0.1500 - 0.2500

HPD URL:

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities were considered per the Pharaoh's Database

OTHER MATERIAL NOTES:

CARBOXYLIC ACIDS, DI-, C4-11 (CARBOXYLIC ACIDS, DI-, C4-11)

ID: 68937-72-4

%: 49.0000 - 95.0000 GS: NoGS RC: None NANO: No ROLE: Base

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

WATER (WATER)

ID: 7732-18-5

%: 0.0000 - 5.0000 GS: BM-4 RC: None NANO: No ROLE: Base

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

SIMETHICONE (SIMETHICONE)

ID: 8050-81-5

#: 0.0000 - 5.0000

GS: LT-UNK

RC: UNK

NANO: No

ROLE: Plasticizer

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

EUCON WO

#: 0.0800 - 0.5000

HPD URL: <https://hpdrepository.hpd-collaborative.org/repository/HPDs/186-20131029150133.pdf>

PRODUCT THRESHOLD:

RESIDUALS AND IMPURITIES CONSIDERED: Yes

1000 ppm

RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities were considered and none reported on this HPD.

OTHER MATERIAL NOTES:

WATER (WATER)

ID: 7732-18-5

#: 75.0000 - 85.0000

GS: BM-4

RC: None

NANO: No

ROLE: Diluent

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

SODIUM HYDROXIDE (SODIUM HYDROXIDE)

ID: 1310-73-2

#: 5.0000 - 10.0000

GS: LT-P1

RC: UNK

NANO: No

ROLE: Base

HAZARDS:

AGENCY(IES) WITH WARNINGS:

SKIN IRRITATION

EU - R-phrases

R35 - Causes severe burns

SKIN IRRITATION

EU - GHS (H-Statements)

H314 - Causes severe skin burns and eye damage

PHYSICAL HAZARD (REACTIVE)

Korea - GHS

H290: May be corrosive to metals

SUBSTANCE NOTES:

((NITRILOTRIS(METHYLENE))TRIPHOSPHONIC ACID (NITRILOTRIS(METHYLENE))TRIPHOSPHONIC ACID)

ID: 6419-19-8

#: 5.0000 - 10.0000

GS: LT-UNK

RC: None

NANO: No

ROLE: Stabilizer

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

SODIUM GLUCONATE (SODIUM GLUCONATE)

ID: 527-07-1

%: **1.0000 - 6.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Chelate**

HAZARDS:

None Found

AGENCY(IES) WITH WARNINGS:

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

1,4-DIOXANE (1,4-DIOXANE)

ID: 123-91-1

%: **0.1000 - 1.0000** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Ether**

HAZARDS:

EYE IRRITATION

EU - R-phrases

R36 - Irritating to eyes

CANCER

EU - R-phrases

R40 - Limited Evidence of Carcinogenic Effects

CANCER

US EPA - IRIS Carcinogens

(2005) Likely to be Carcinogenic to humans

CANCER

IARC

Group 2b - Possibly carcinogenic to humans

CANCER

CA EPA - Prop 65

Carcinogen

CANCER

US CDC - Occupational Carcinogens

Occupational Carcinogen

CANCER

US NIH - Report on Carcinogens

Reasonably Anticipated to be Human Carcinogen

EYE IRRITATION

EU - GHS (H-Statements)

H319 - Causes serious eye irritation

CANCER

EU - GHS (H-Statements)

H351 - Suspected of causing cancer

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

RESTRICTED LIST

US EPA - PPT Chemical Action Plans

TSCA Work Plan chemical - ongoing chemical (risk) assessment

CANCER

MAK

Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

CANCER

New Zealand - GHS

6.7A - Known or presumed human carcinogens

PHYSICAL HAZARD (REACTIVE)

EU - GHS (H-Statements)

H225 - Highly flammable liquid and vapour

SUBSTANCE NOTES:

SODIUM O-PHENYLPHENATE (SODIUM O-PHENYLPHENATE)

ID: 132-27-4

%: **0.0000 - 0.1000** GS: **LT-1** RC: **None** NANO: **No** ROLE: **In storage antimicrobial**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MAMMALIAN	EU - R-phrases	R22 - Harmful if Swallowed
SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
EYE IRRITATION	EU - R-phrases	R41 - Risk of serious damage to eyes
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H318 - Causes serious eye damage
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES:

DAZOMET (DAZOMET)

ID: 533-74-4

#: **0.0000 - 0.0600** GS: **BM-2** RC: **None** NANO: **No** ROLE: **In storage antimicrobial**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MAMMALIAN	EU - R-phrases	R22 - Harmful if Swallowed
EYE IRRITATION	EU - R-phrases	R36 - Irritating to eyes
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
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
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters

SUBSTANCE NOTES:

FORMALDEHYDE (FORMALDEHYDE)

ID: 50-00-0

#: **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	R24 - Toxic in Contact with Skin

MAMMALIAN	EU - R-phrases	R25 - Toxic if Swallowed
SKIN IRRITATION	EU - R-phrases	R34 - Causes burns
CANCER	EU - R-phrases	R40 - Limited Evidence of Carcinogenic Effects
SKIN SENSITIZE	EU - R-phrases	R43 - May cause sensitization by skin contact
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
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
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens	Known to be a human Carcinogen
MAMMALIAN	EU - GHS (H-Statements)	H301 - Toxic if swallowed
MAMMALIAN	EU - GHS (H-Statements)	H311 - Toxic in contact with skin
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
MAMMALIAN	EU - GHS (H-Statements)	H331 - Toxic if inhaled
GENE MUTATION	EU - GHS (H-Statements)	H341 - Suspected of causing genetic defects
CANCER	EU - GHS (H-Statements)	H350 - May cause cancer
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 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization
MAMMALIAN	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances
CANCER	Korea - GHS	Carcinogenicity - Category 1 [H350 - May cause cancer]
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
CANCER	Japan - GHS	Carcinogenicity - Category 1A
CANCER	Australia - GHS	H350i - May cause cancer by inhalation

SUBSTANCE NOTES:

Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

MULTI-ATTRIBUTE

Environmental Product Declaration (EPD) by Labeling Sustainability

CERTIFYING PARTY: **Third Party**

ISSUE DATE: **2017-**

EXPIRY DATE: **2022-**

CERTIFIER OR LAB: **Institute for**

APPLICABLE FACILITIES: **Mexico City Plant**

08-01

08-01

Environmental Research and

CERTIFICATE URL:

Education

CERTIFICATION AND COMPLIANCE NOTES:

Section 4: Accessories

This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.

No accessories are required for this product.

Section 5: General Notes

Product Components and Corresponding ASTM Standards: Portland Cement ASTM C150 Portland Cement, Fly Ash ASTM C618 Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete, Natural or Crushed Aggregate ASTM C33 Concrete Aggregates, Admixtures ASTM C494 Chemical Admixtures for Concrete, Silica Fume ASTM C1240 Standard Specification for Silica Fume Used in Cementitious Mixtures, Batch Water ASTM C1602 Mixing Water Used in Production of Hydraulic Cement Concrete.



MANUFACTURER INFORMATION

MANUFACTURER: **Holcim Mexico, S.A. de C.V.**
 ADDRESS: **Campos Elíseos 345, Polanco, Polanco III Secc,**
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 WEBSITE: <http://www.holcim.com.mx/>

CONTACT NAME: **Ibette Sosa**
 TITLE: **Gerencia Ambiental**
 PHONE: **+52 55 5724 0000**
 EMAIL: ibette.sosa@lafargeholcim.com

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)	LT-1 List Translator Likely Benchmark 1
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS Unknown (no data on List Translator Lists)
BM-U Benchmark Unspecified (insufficient data to benchmark)	

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 Terms

Inventory Methods:

Nested Method / Material Threshold Substances listed within each material per threshold indicated per material
Nested Method / Product Threshold Substances listed within each material per threshold indicated per product
Basic Method / Product Threshold Substances listed individually per threshold indicated per product

Nano Composed of nano scale particles or nanotechnology
Third Party Verified Verification by independent certifier approved by HPDC
Preparer Third party preparer, if not self-prepared by manufacturer
Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- *a method for the assessment of exposure or risk associated with product handling or use,*
- *a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.*

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

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

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.