

HPD UNIQUE IDENTIFIER: 24115

CLASSIFICATION: 03 30 00 Cast-in-Place Concrete

PRODUCT DESCRIPTION: MasterLife 300C admixture is an integral crystalline capillary waterproofing admixture for concrete. Designed for use in above- and below-grade applications, MasterLife 300C admixture reacts in concrete to form non-soluble crystalline hydration products in the capillary pores of the concrete. These crystalline hydration products effectively reduce the permeability of concrete and seal the hairline cracks. For more information, visit: <https://www.master-builders-solutions.com/en-us>

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold level	Residuals/Impurities	<i>All Substances Above the Threshold Indicated Are:</i>
<input type="radio"/> Nested Materials Method	<input checked="" type="radio"/> 100 ppm	<input checked="" type="radio"/> Considered	Characterized <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No
<input checked="" type="radio"/> Basic Method	<input type="radio"/> 1,000 ppm	<input type="radio"/> Partially Considered	<i>% weight and role provided for all substances.</i>
Threshold Disclosed Per	<input type="radio"/> Per GHS SDS	<input type="radio"/> Not Considered	Screened <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No
<input type="radio"/> Material	<input type="radio"/> Other	Explanation(s) provided for Residuals/Impurities?	<i>All substances screened using Priority Hazard Lists with results disclosed.</i>
<input checked="" type="radio"/> Product		<input checked="" type="radio"/> Yes <input type="radio"/> No	Identified <input type="radio"/> Yes Ex/SC <input type="radio"/> Yes <input checked="" type="radio"/> No
			<i>One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.</i>

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

MASTERLIFE 300C [PORTLAND CEMENT LT-P1 | CAN | END
SODIUM CARBONATE LT-UNK | EYE FERRIC OXIDE BM-1 | CAN
LIMESTONE, CALCIUM CARBONATE LT-UNK D-TARTARIC ACID LT-
UNK TITANIUM DIOXIDE LT-1 | CAN | END GYPSUM LT-UNK QUARTZ
LT-1 | CAN CALCIUM OXIDE LT-P1 MAGNESIUM OXIDE LT-UNK |
CAN UNDISCLOSED BM-2]

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

Contents highest concern GreenScreen Benchmark or List translator Score ... BM-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

The assessment including residuals and impurities has verified all hazard classifications are conducted within the provisions of North American countries' regulatory requirements. Note: The MasterLife 300C grey and red products do not contain any red list substances from the Living Building Challenge Red List v 4.0.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE *See Section 3 for additional listings.*

VOC emissions: Exempt

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients Option 1

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared

VERIFIER:
VERIFICATION #:

SCREENING DATE: 2020-04-27

PUBLISHED DATE: 2021-03-19

EXPIRY DATE: 2023-04-27

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 2.2, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-2-standard

MASTERLIFE 300C

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: All substances including residuals and impurities are considered in the regulatory evaluation. The assessment has verified all hazard classifications are conducted within the provisions of North American countries' regulatory requirements.

OTHER PRODUCT NOTES: Concrete admixtures are introduced into a concrete mixture and would not be considered a finished, installed product but a material input to a concrete mixture.

PORTLAND CEMENT

ID: 65997-15-1

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-04-27

#: 25.0000 GS: LT-P1 RC: None NANO: No SUBSTANCE ROLE: Binder

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: All residuals and impurities are considered in the evaluation of this product.

SODIUM CARBONATE

ID: 497-19-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-04-27

#: 15.0000 GS: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Binder

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
EYE	EU - GHS (H-Statements)	H319 - Causes serious eye irritation

SUBSTANCE NOTES: All residuals and impurities are considered in the evaluation of this product.

FERRIC OXIDE

ID: 1309-37-1

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-04-27

#: 10.0000 GS: BM-1 RC: None NANO: No SUBSTANCE ROLE: Pigment

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

SUBSTANCE NOTES: All residuals and impurities are considered in the evaluation of this product.

LIMESTONE, CALCIUM CARBONATE

ID: 1317-65-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-04-27**%: **3.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Binder**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: All residuals and impurities are considered in the evaluation of this product.

D-TARTARIC ACID

ID: 87-69-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-04-27**%: **1.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Buffer**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: All residuals and impurities are considered in the evaluation of this product.

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-04-27**%: **0.0000 - 10.0000** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES: All residuals and impurities are considered in the evaluation of this product.

GYPSUM

ID: 13397-24-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-04-27**%: **0.0000 - 7.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Buffer**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: All residuals and impurities are considered in the evaluation of this product.

QUARTZ

ID: 14808-60-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-04-27**%: **0.0000 - 5.0000** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	US NIH - Report on Carcinogens	Known to be Human Carcinogen (respirable size - occupational setting)
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CAN	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
CAN	IARC	Group 1 - Agent is Carcinogenic to humans
CAN	GHS - Australia	H350i - May cause cancer by inhalation
CAN	GHS - New Zealand	6.7A - Known or presumed human carcinogens
CAN	GHS - Japan	Carcinogenicity - Category 1A [H350]

SUBSTANCE NOTES: All residuals and impurities are considered in the evaluation of this product.

CALCIUM OXIDE

ID: 1305-78-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-04-27**%: **0.0000 - 5.0000** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Binder**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: All residuals and impurities are considered in the evaluation of this product.

MAGNESIUM OXIDE

ID: 1309-48-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-04-27**%: **0.0000 - 5.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Buffer**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES: All residuals and impurities are considered in the evaluation of this product.

UNDISCLOSEDID: **Undisclosed**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-04-27**%: **0.0000 - 2.0000** GS: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This is a proprietary ingredient. All residuals and impurities are considered in the evaluation of this product.

Section 3: Certifications and Compliance

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

VOC EMISSIONS

Exempt

CERTIFYING PARTY: Self-declared

ISSUE DATE: 2020-01- EXPIRY DATE:

CERTIFIER OR LAB: USGBC

APPLICABLE FACILITIES: Master Builders Solutions -

01

Admixture Systems Plants

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: Per LEED Indoor Environmental Quality, Low-Emitting Materials: Concrete is an inherently non-emitting source. Products that are inherently non-emitting sources of VOC's (Concrete, Stone, ceramic, powder-coated metals, plated or anodized metal, glass, clay brick, and unfinished/untreated solid wood flooring) are considered fully compliant without any VOC emissions testing if they do not include integral organic based surface coatings, binders, or sealants.

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

For additional information visit the Master Builders Solutions product website at:

<https://www.master-builders-solutions.com/en-us>

MANUFACTURER INFORMATION

MANUFACTURER: Master Builders Solutions
ADDRESS: 23700 Chagrin Blvd
 Beachwood Ohio 44122, USA
WEBSITE: <https://www.master-builders-solutions.com/en-us>

CONTACT NAME: David R Green
TITLE: Manager Sustainability
PHONE: 216-839-7803
EMAIL: david.green@mbcc-group.com

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

AQU Aquatic toxicity	LAN Land toxicity	PHY Physical hazard (flammable or reactive)
CAN Cancer	MAM Mammalian/systemic/organ toxicity	REP Reproductive
DEV Developmental toxicity	MUL Multiple	RES Respiratory sensitization
END Endocrine activity	NEU Neurotoxicity	SKI Skin sensitization/irritation/corrosivity
EYE Eye irritation/corrosivity	NF Not found on Priority Hazard Lists	UNK Unknown
GEN Gene mutation	OZO Ozone depletion	
GLO Global warming	PBT Persistent, bioaccumulative, and toxic	

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-UNK List Translator Benchmark Unknown (the chemical is present on at least one GreenScreen Specified List, but the information contained within the list did not result in a clear mapping to a LT-1 or LTP1 score.)
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)	NoGS No GreenScreen.

Recycled Types

PreC Pre-consumer recycled content
PostC Post-consumer recycled content
UNK Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms:

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

Inventory Methods:

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

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

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

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

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

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

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