

HPD UNIQUE IDENTIFIER: 25645

CLASSIFICATION: 03 00 00 Concrete

**PRODUCT DESCRIPTION:** Master X-Seed 55 is a patent-pending, strength-enhancing admixture that improves both early and late-age strength development in concrete, while supporting sustainable construction. Master X-Seed 55 admixture is based on a unique technology that facilitates improved cement hydration, thus enhancing strength development. The strength-enhancing property of Master X-Seed 55 admixture permits a reduction in the total cementitious materials content of given concrete mixture while maintaining compressive strength development equivalent to that of reference concrete with associated benefits in CO2 emissions reductions. For additional information, please visit our website at: <https://www.master-builders-solutions.com/en-us/architects-and-designers>

**Section 1: Summary**

**Basic Method / Product Threshold**

**CONTENT INVENTORY**

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

**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**

**MASTER X-SEED 55 [ WATER BM-4 UNDISCLOSED LT-P1**

**UNDISCLOSED LT-UNK | EYE UNDISCLOSED NoGS UNDISCLOSED**

**LT-P1 | END UNDISCLOSED LT-UNK UNDISCLOSED LT-P1**

**UNDISCLOSED LT-UNK | SKI UNDISCLOSED NoGS UNDISCLOSED**

**NoGS UNDISCLOSED LT-UNK ]**

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

Contents highest concern GreenScreen Benchmark or List translator Score ... LT-P1

Nanomaterial ... No

**INVENTORY AND SCREENING NOTES:**

All residuals and impurities within the threshold are included.

**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**

No pre-checks completed or disclosed

|  |  |  |
|--|--|--|
| <p>Third Party Verified?</p> <p><input type="radio"/> Yes</p> <p><input checked="" type="radio"/> No</p> | <p>PREPARER: Self-Prepared</p> <p>VERIFIER:</p> <p>VERIFICATION #:</p> | <p>SCREENING DATE: 2020-09-25</p> <p>PUBLISHED DATE: 2021-08-10</p> <p>EXPIRY DATE: 2023-09-25</p> |
|--|--|--|

## 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](http://www.hpd-collaborative.org/hpd-2-2-standard)

### MASTER X-SEED 55

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: All residuals and impurities within the threshold are included.

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

#### WATER

ID: 7732-18-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-09-25 10:33:10

%: 60.0000 GS: BM-4 RC: None NANO: No SUBSTANCE ROLE: Carrier

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|-------------|------------------------|----------|
|-------------|------------------------|----------|

|            |  |  |
|------------|--|--|
| None found |  | No warnings found on HPD Priority Hazard Lists |
|------------|--|--|

SUBSTANCE NOTES: All impurities and residuals within the threshold are included.

#### UNDISCLOSED

ID: Undisclosed

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-09-25 10:33:10

%: 10.0000 GS: LT-P1 RC: None NANO: No SUBSTANCE ROLE: Intermediate

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|-------------|------------------------|----------|
|-------------|------------------------|----------|

|            |  |  |
|------------|--|--|
| None found |  | No warnings found on HPD Priority Hazard Lists |
|------------|--|--|

SUBSTANCE NOTES: All impurities and residuals within the threshold are included.

#### UNDISCLOSED

ID: Undisclosed

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-09-25 10:33:10

%: 5.0000 GS: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Emulsifier

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|-------------|------------------------|----------|
|-------------|------------------------|----------|

|     |                         |                                      |
|-----|-------------------------|--------------------------------------|
| EYE | EU - GHS (H-Statements) | H319 - Causes serious eye irritation |
|-----|-------------------------|--------------------------------------|

SUBSTANCE NOTES: All residuals and impurities within the threshold are included.

#### UNDISCLOSED

ID: Undisclosed

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-09-25 10:33:10

|  |                        |  |                 |   |
|--|------------------------|--|-----------------|---|
| %: <b>5.0000</b>   | GS: <b>NoGS</b>        | RC: <b>None</b>                                | NANO: <b>No</b> | SUBSTANCE ROLE: <b>Processing regulator</b> |
| HAZARD TYPE  | AGENCY AND LIST TITLES | WARNINGS                                       |                 |   |
| None found   |                        | No warnings found on HPD Priority Hazard Lists |                 |   |
| SUBSTANCE NOTES: All impurities and residuals within the threshold are included. |                        |  |                 |   |

**UNDISCLOSED** ID: **Undisclosed**

|  |                                       |   |                 |                                  |
|--|---------------------------------------|---|-----------------|----------------------------------|
| HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>            |                                       | HAZARD SCREENING DATE: <b>2020-09-25 10:33:11</b> |                 |                                  |
| %: <b>1.0000</b>   | GS: <b>LT-P1</b>                      | RC: <b>None</b>                                   | NANO: <b>No</b> | SUBSTANCE ROLE: <b>Activator</b> |
| HAZARD TYPE  | AGENCY AND LIST TITLES                | WARNINGS  |                 |                                  |
| END  | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor                     |                 |                                  |
| SUBSTANCE NOTES: All residuals and impurities within the threshold are included. |                                       |   |                 |                                  |

**UNDISCLOSED** ID: **Undisclosed**

|  |                        |   |                 |                                  |
|--|------------------------|---|-----------------|----------------------------------|
| HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>            |                        | HAZARD SCREENING DATE: <b>2020-09-25 10:33:11</b> |                 |                                  |
| %: <b>0.5000</b>   | GS: <b>LT-UNK</b>      | RC: <b>None</b>                                   | NANO: <b>No</b> | SUBSTANCE ROLE: <b>Activator</b> |
| HAZARD TYPE  | AGENCY AND LIST TITLES | WARNINGS  |                 |                                  |
| None found   |                        | No warnings found on HPD Priority Hazard Lists    |                 |                                  |
| SUBSTANCE NOTES: All impurities and residuals within the threshold are included. |                        |   |                 |                                  |

**UNDISCLOSED** ID: **Undisclosed**

|  |                        |   |                 |  |
|--|------------------------|---|-----------------|--|
| HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>            |                        | HAZARD SCREENING DATE: <b>2020-09-25 10:33:11</b> |                 |  |
| %: <b>0.1000</b>   | GS: <b>LT-P1</b>       | RC: <b>None</b>                                   | NANO: <b>No</b> | SUBSTANCE ROLE: <b>Polymer species</b> |
| HAZARD TYPE  | AGENCY AND LIST TITLES | WARNINGS  |                 |  |
| None found   |                        | No warnings found on HPD Priority Hazard Lists    |                 |  |
| SUBSTANCE NOTES: All residuals and impurities within the threshold are included. |                        |   |                 |  |

**UNDISCLOSED** ID: **Undisclosed**

|  |                        |   |                 |                                 |
|--|------------------------|---|-----------------|---------------------------------|
| HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>            |                        | HAZARD SCREENING DATE: <b>2020-09-25 10:33:11</b>       |                 |                                 |
| %: <b>0.1000</b>   | GS: <b>LT-UNK</b>      | RC: <b>None</b>   | NANO: <b>No</b> | SUBSTANCE ROLE: <b>Defoamer</b> |
| HAZARD TYPE  | AGENCY AND LIST TITLES | WARNINGS  |                 |                                 |
| SKI  | MAK                    | Sensitizing Substance Sh - Danger of skin sensitization |                 |                                 |
| SUBSTANCE NOTES: All impurities and residuals within the threshold are included. |                        |   |                 |                                 |

**UNDISCLOSED** ID: **Undisclosed**

|   |                        |   |                 |                                   |
|---|------------------------|---|-----------------|-----------------------------------|
| HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b> |                        | HAZARD SCREENING DATE: <b>2020-09-25 10:33:11</b> |                 |                                   |
| %: <b>0.1000</b>  | GS: <b>NoGS</b>        | RC: <b>None</b>                                   | NANO: <b>No</b> | SUBSTANCE ROLE: <b>Stabilizer</b> |
| HAZARD TYPE   | AGENCY AND LIST TITLES | WARNINGS  |                 |                                   |
| None found  |                        | No warnings found on HPD Priority Hazard Lists    |                 |                                   |

SUBSTANCE NOTES: All impurities and residuals within the threshold are included.

**UNDISCLOSED**

ID: **Undisclosed**

|   |                        |   |                 |                                |
|---|------------------------|---|-----------------|--------------------------------|
| HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b> |                        | HAZARD SCREENING DATE: <b>2020-09-25 10:33:12</b> |                 |                                |
| %: <b>0.0500</b>  | GS: <b>NoGS</b>        | RC: <b>None</b>                                   | NANO: <b>No</b> | SUBSTANCE ROLE: <b>Pigment</b> |
| HAZARD TYPE   | AGENCY AND LIST TITLES | WARNINGS  |                 |                                |
| None found  |                        | No warnings found on HPD Priority Hazard Lists    |                 |                                |

SUBSTANCE NOTES: All residuals and impurities within the threshold are included.

**UNDISCLOSED**

ID: **Undisclosed**

|   |                        |   |                 |  |
|---|------------------------|---|-----------------|--|
| HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b> |                        | HAZARD SCREENING DATE: <b>2020-09-25 10:33:12</b> |                 |  |
| %: <b>Impurity/Residual</b>   | GS: <b>LT-UNK</b>      | RC: <b>None</b>                                   | NANO: <b>No</b> | SUBSTANCE ROLE: <b>Impurity/Residual</b> |
| HAZARD TYPE   | AGENCY AND LIST TITLES | WARNINGS  |                 |  |
| None found  |                        | No warnings found on HPD Priority Hazard Lists    |                 |  |

SUBSTANCE NOTES: All residuals and impurities within the threshold are included.

## 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: Internal

APPLICABLE FACILITIES: Master Builders Solutions facilities

01

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, please visit our website at:

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

**MANUFACTURER INFORMATION**

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

**CONTACT NAME:** David Green  
**TITLE:** 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**

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

**GreenScreen (GS)**

|   |  |
|---|--|
| <b>BM-4</b> Benchmark 4 (prefer-safer chemical)                     | <b>LT-1</b> List Translator 1 (Likely Benchmark-1)   |
| <b>BM-3</b> Benchmark 3 (use but still opportunity for improvement) | <b>LT-UNK</b> 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.) |
| <b>BM-2</b> Benchmark 2 (use but search for safer substitutes)      | <b>NoGS</b> No GreenScreen.  |
| <b>BM-1</b> Benchmark 1 (avoid - chemical of high concern)          |  |
| <b>BM-U</b> Benchmark Unspecified (due to insufficient data)        |  |
| <b>LT-P1</b> List Translator Possible 1 (Possible Benchmark-1)      |  |

**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.*