

HPD UNIQUE IDENTIFIER: 21834

CLASSIFICATION: 03 00 00 Concrete

PRODUCT DESCRIPTION: MasterPolyheed 997 admixture is a patented multi-component, mid-range water-reducing admixture. MasterPolyHeed 997 admixture meets ASTM C 494/C 494M requirements for Type A, water-reducing, and Type F, high-range water-reducing, admixtures. Recommended uses: •All concrete applications where superior workability, pumpability and finishability qualities are desired, in particular, flatwork, pumped concrete and pervious concrete •Concrete containing manufactured sand and harsh concrete mixtures 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

Inventory Reporting Format

- Nested Materials Method
 Basic Method

Threshold Disclosed Per

- Material
 Product

Threshold level

- 100 ppm
 1,000 ppm
 Per GHS SDS
 Other

Residuals/Impurities

- Considered
 Partially Considered
 Not Considered

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

All Substances Above the Threshold Indicated Are:

Characterized Yes Ex/SC Yes No
% weight and role provided for all substances.

Screened Yes Ex/SC Yes No
All substances screened using Priority Hazard Lists with results disclosed.

Identified Yes Ex/SC Yes No
One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.

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

MASTERPOLYHEED 997 [**UNDISCLOSED** BM-4 **UNDISCLOSED** LT-UNK
SODIUM NITRATE LT-P1 | END **THIOCYANATE SODIUM** LT-P1 2,2',2'',2'''-
(1,2-ETHANEDIYLDINITRILO)TETRAKISETHANOL NoGS
TRIETHANOLAMINE LT-P1 | RES | END **UNDISCLOSED** LT-UNK
UNDISCLOSED NoGS **UNDISCLOSED** LT-P1 | MUL **UNDISCLOSED** LT-1 |
RES | SKI | DEV | MUL | REP **O-PHENYLPHENOL** LT-1 | CAN | END | AQU |
SKI | EYE | MUL **UNDISCLOSED** LT-P1 | MUL **DAZOMET** BM-2 | AQU | EYE |
MUL **UNDISCLOSED** LT-P1 | DEV | SKI **UNDISCLOSED** LT-P1 | END
UNDISCLOSED LT-P1 | SKI | PHY **UNDISCLOSED** BM-1 | PHY | SKI
DIETHANOLAMINE BM-1 | RES | CAN | SKI | EYE | END]

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

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

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

Third Party Verified?

Yes

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2020-01-29

PUBLISHED DATE: 2020-09-25

EXPIRY DATE: 2023-01-29



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

MASTERPOLYHEED 997

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.

UNDISCLOSED

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-01-29

#: 40.0000

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 residuals and impurities within the threshold are included.

UNDISCLOSED

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-01-29

#: 15.0000

GS: LT-UNK

RC: None

NANO: No

SUBSTANCE ROLE: Polymer species

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.

SODIUM NITRATE

ID: 7631-99-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-01-29

#: Impurity/Residual

GS: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Impurity/Residual

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

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

THIOCYANATE SODIUM

ID: 540-72-7

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2020-01-29			
%: 0.0000 - 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 residuals and impurities within the threshold are included.

2,2',2'',2'''-(1,2-ETHANEDIYLDINITRILLO)TETRAKISETHANOL

ID: 140-07-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2020-01-29			
%: 0.0000 - 10.0000	GS: NoGS	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 within the threshold are included.

TRIETHANOLAMINE

ID: 102-71-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2020-01-29			
%: 0.0000 - 3.0000	GS: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Dispersant

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

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

UNDISCLOSED

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2020-01-29			
%: 0.0000 - 0.5000	GS: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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None found		No warnings found on HPD Priority Hazard Lists
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SUBSTANCE NOTES: All residuals and impurities within the threshold are included.

UNDISCLOSED

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2020-01-29
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%: 0.0000 - 0.2400	GS: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Surfactant
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HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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None found		No warnings found on HPD Priority Hazard Lists
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SUBSTANCE NOTES: All residuals and impurities within the threshold are included.

UNDISCLOSED

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2020-01-29
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%: 0.0000 - 0.2500	GS: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Surfactant
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HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
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SUBSTANCE NOTES: All residuals and impurities within the threshold are included.

UNDISCLOSED

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2020-01-29
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%: 0.0000 - 0.2000	GS: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Surfactant
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HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
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
DEVELOPMENTAL	EU - GHS (H-Statements)	H360Df - May damage the unborn child. Suspected of damaging fertility
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
REPRODUCTIVE	GHS - New Zealand	6.8A - Known or presumed human reproductive or developmental toxicants
REPRODUCTIVE	GHS - Japan	Toxic to reproduction - Category 1B [H360]
REPRODUCTIVE	EU - Annex VI CMRs	Reproductive Toxicity - Category 1B
DEVELOPMENTAL	GHS - Australia	H360Df - May damage the unborn child. Suspected of damaging fertility

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

O-PHENYLPHENOL

ID: 90-43-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2020-01-29**

#: **0.0000 - 0.1000**

GS: **LT-1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Biocide**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	CA EPA - Prop 65	Carcinogen
ENDOCRINE	EU - Priority Endocrine Disruptors	Category 2 - In vitro evidence of biological activity related to Endocrine Disruption
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)	H319 - Causes serious eye irritation
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
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: All residuals and impurities within the threshold are included.

UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2020-01-29**

#: **0.0000 - 0.2000**

GS: **LT-P1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Polymer species**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

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

DAZOMET

ID: 533-74-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-01-29**

#: **0.0000 - 0.2000** GS: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Biocide**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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: All residuals and impurities within the threshold are included.

UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-01-29**

#: **0.0000 - 0.2000** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Biocide**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
DEVELOPMENTAL	MAK	Pregnancy Risk Group B
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

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

UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-01-29**

#: **0.0000 - 0.2000** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Buffer**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

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

UNDISCLOSED

%: **0.0000 - 0.2000**GS: **LT-P1**RC: **None**NANO: **No**SUBSTANCE ROLE: **Buffer**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
PHYSICAL HAZARD (REACTIVE)	GHS - Korea	H290 - May be corrosive to metals

SUBSTANCE NOTES: **All residuals and impurities within the threshold are included.****UNDISCLOSED**%: **Impurity/Residual**GS: **BM-1**RC: **None**NANO: **No**SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H228 - Flammable solid
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: **All residuals and impurities within the threshold are included.****DIETHANOLAMINE**ID: **111-42-2**%: **Impurity/Residual**GS: **BM-1**RC: **None**NANO: **No**SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H318 - Causes serious eye damage
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

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-**

EXPIRY DATE:

CERTIFIER OR LAB: **Internal**

APPLICABLE FACILITIES: **Master Builders Solutions -**

01-01

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 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: **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)	NoGS No GreenScreen.
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)	

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

