

CLASSIFICATION: 04 05 13

created via: HPDC Online Builder

**PRODUCT DESCRIPTION:** This HPD covers the entire range of Betomix Plus® products by Daubois Products Inc. Betomix Plus® is a mortar containing Portland cement, type S hydrated lime and sand meeting the CSA A179 specifications. Betomix Plus® is mainly used for laying bricks, architectural blocks or stones. It can also be used as a parging mix to cover foundations. Available in Type N, Type O and Type S.

**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 2 of 4 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**

AGGREGATES [ GRAVEL (GRAVEL) NoGS ] PORTLAND CEMENT BLEND [ PORTLAND CEMENT (PORTLAND CEMENT) LT-P1 | END | CAN GYPSUM (GYPSUM) LT-UNK LIMESTONE; CALCIUM CARBONATE (LIMESTONE; CALCIUM CARBONATE) LT-UNK CALCIUM OXIDE (CALCIUM OXIDE) LT-P1 MAGNESIUM OXIDE (MAGNESIUM OXIDE) LT-UNK | CAN QUARTZ (QUARTZ) LT-1 | CAN POTASSIUM SULFATE (POTASSIUM SULFATE) LT-UNK SODIUM SULFATE (SODIUM SULFATE) LT-UNK SILICA FUME (SILICA FUME) LT-P1 CALCIUM HYDROXIDE (CALCIUM HYDROXIDE) LT-P1 ] HYDRATED LIME TYPE S [ CALCIUM HYDROXIDE (CALCIUM HYDROXIDE) LT-P1 CALCIUM MAGNESIUM HYDROXIDE (CALCIUM MAGNESIUM HYDROXIDE) NoGS CALCIUM MAGNESIUM HYDROXIDE OXIDE (CAMG(OH)2O) (CALCIUM MAGNESIUM HYDROXIDE OXIDE (CAMG(OH)2O)) NoGS QUARTZ (QUARTZ) LT-1 | CAN ] COLORING AGENT [ FERRIC OXIDE YELLOW (FERRIC OXIDE YELLOW) LT-UNK FERRIC OXIDE (FERRIC OXIDE) BM-2 | CAN IRON OXIDE (IRON OXIDE) LT-UNK | CAN ]

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

**INVENTORY AND SCREENING NOTES:**

HPD prepared using a Nested Materials Inventory with a product threshold at 1,000 ppm. Admixtures are added to Betomix Plus® formulations but are present in the final product below the disclosure threshold of 1,000 ppm and therefore were not disclosed. The content inventory includes ranges to protect Daubois' proprietary formulations. Betomix Plus® contains a material with Special Conditions (defined substance without ID) as per the HPDC. Guidelines for reporting Special Conditions materials are still under development by HPDC. Daubois Products Inc. will update the HPD accordingly once these guidelines get published. Substances present in Betomix Plus®, as well as known residuals and impurities, have been disclosed at 100 ppm. More details about how residuals and impurities were considered available in the appropriate sections.

**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: CDPH Standard Method V1.1 - Not tested

**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: 2018-02-13  
PUBLISHED DATE: 2018-02-19  
EXPIRY DATE: 2021-02-13

## 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](http://www.hpd-collaborative.org/hpd-2-1-standard)

### AGGREGATES

#: 65.0000 - 90.0000

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: Information not available from supplier.

OTHER MATERIAL NOTES: Aggregates are composed of two different kinds of sand coming from two different quarries. Amount of aggregates varies among the whole product range.

#### GRAVEL (GRAVEL)

ID: Not registered

#: 100.0000

GS: NoGS

RC: None

NANO: No

ROLE: Main material

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Approximation for sand.

### PORTLAND CEMENT BLEND

#: 10.0000 - 35.0000

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities identified in several supplier SDS sheets.

OTHER MATERIAL NOTES: Portland cement blend is an average composition of Portland cement used in the formulation of Betomix Plus® products. Therefore, the average composition introduces ranges in substance content.

#### PORTLAND CEMENT (PORTLAND CEMENT)

ID: 65997-15-1

#: 5.0000 - 100.0000

GS: LT-P1

RC: None

NANO: No

ROLE: Main substance

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: See Other Material Notes.

**GYPSUM (GYPSUM)**

ID: 13397-24-5

#: <b>1.0000 - 10.0000</b>	GS: <b>LT-UNK</b>	RC: <b>None</b>	NANO: <b>No</b>	ROLE: <b>Ingredient</b>
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
None Found	No warnings found on HPD Priority lists			
SUBSTANCE NOTES: See Other Material Notes.				

**LIMESTONE; CALCIUM CARBONATE (LIMESTONE; CALCIUM CARBONATE)**

ID: 1317-65-3

#: <b>0.0000 - 50.0000</b>	GS: <b>LT-UNK</b>	RC: <b>None</b>	NANO: <b>No</b>	ROLE: <b>Ingredient</b>
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
None Found	No warnings found on HPD Priority lists			
SUBSTANCE NOTES: Substance present in most but not all cement formulations.				

**CALCIUM OXIDE (CALCIUM OXIDE)**

ID: 1305-78-8

#: <b>0.0000 - 5.0000</b>	GS: <b>LT-P1</b>	RC: <b>None</b>	NANO: <b>No</b>	ROLE: <b>Ingredient</b>
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
None Found	No warnings found on HPD Priority lists			
SUBSTANCE NOTES: Substance present in most but not all cement formulations.				

**MAGNESIUM OXIDE (MAGNESIUM OXIDE)**

ID: 1309-48-4

#: <b>0.0000 - 4.0000</b>	GS: <b>LT-UNK</b>	RC: <b>None</b>	NANO: <b>No</b>	ROLE: <b>Ingredient   impurity</b>
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels		
SUBSTANCE NOTES: Substance present in most but not all cement formulations. Considered as an impurity in one formulation.				

**QUARTZ (QUARTZ)**

ID: 14808-60-7

#: <b>0.0000 - 10.0000</b>	GS: <b>LT-1</b>	RC: <b>None</b>	NANO: <b>No</b>	ROLE: <b>Ingredient</b>
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen		
CANCER	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route		
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
CANCER	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens
CANCER	Australia - GHS	H350 - May cause cancer
CANCER	Japan - GHS	Carcinogenicity - Category 1A

SUBSTANCE NOTES: Substance present in most but not all cement formulations.

### POTASSIUM SULFATE (POTASSIUM SULFATE)

ID: 7778-80-5

#: **Impurity/Residual** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: Substance present as an impurity in some but not all cement formulations.

### SODIUM SULFATE (SODIUM SULFATE)

ID: 7757-82-6

#: **Impurity/Residual** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: Substance present as an impurity in some but not all cement formulations.

### SILICA FUME (SILICA FUME)

ID: 69012-64-2

#: **0.0000 - 10.0000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Ingredient**

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: Substance present in most but not all cement formulations.

### CALCIUM HYDROXIDE (CALCIUM HYDROXIDE)

ID: 1305-62-0

#: **0.0000 - 20.0000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Ingredient**

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: Substance present in most but not all cement formulations.

## HYDRATED LIME TYPE S

%: 2.0000 - 10.0000

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: According to SDS sheet, the lime may contain crystalline silica at or above detection level 0.1%. Its concentration is dependent upon limestone source.

OTHER MATERIAL NOTES: From the SDS, lime can come from both sources: hydrated lime (Ca(OH)2MgO) or double hydrated lime (CaMg(OH)4). Amount of hydrated lime type S varies among the whole product range.

### CALCIUM HYDROXIDE (CALCIUM HYDROXIDE)

ID: 1305-62-0

%: 30.0000 - 60.0000

GS: LT-P1

RC: None

NANO: No

ROLE: Other constituent

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Other Material Notes.

### CALCIUM MAGNESIUM HYDROXIDE (CALCIUM MAGNESIUM HYDROXIDE)

ID: 39445-23-3

%: 0.0000 - 100.0000

GS: NoGS

RC: None

NANO: No

ROLE: Main material

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Double hydrated lime. Alternative to hydrated lime.

### CALCIUM MAGNESIUM HYDROXIDE OXIDE (CAMG(OH)2O) (CALCIUM MAGNESIUM HYDROXIDE OXIDE (CAMG(OH)2O))

ID: 58398-71-3

%: 0.0000 - 100.0000

GS: NoGS

RC: None

NANO: No

ROLE: Main material

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Hydrated lime. Alternative to Double hydrated lime.

### QUARTZ (QUARTZ)

ID: 14808-60-7

%: Impurity/Residual

GS: LT-1

RC: None

NANO: No

ROLE: Impurity/Residual

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
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
CANCER	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens
CANCER	Australia - GHS	H350 - May cause cancer
CANCER	Japan - GHS	Carcinogenicity - Category 1A

SUBSTANCE NOTES: See Residuals and Impurities Notes.

## COLORING AGENT

%: 0.0000 - 4.0000

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: Information not available from SDS sheet.

OTHER MATERIAL NOTES: Pigments are added to the mix and are essentially made of three basic colors: yellow, red and black. Each substance corresponds to one pigment. It has been decided to apply a weight of 1/3 to each pigment. The amount of pigments varies among the whole product range.

### FERRIC OXIDE YELLOW (FERRIC OXIDE YELLOW)

ID: 51274-00-1

%: **33.3000** 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: See Other Material Notes.

### FERRIC OXIDE (FERRIC OXIDE)

ID: 1309-37-1

%: **33.3000** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Red pigment**

HAZARDS: AGENCY(IES) WITH WARNINGS:

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

SUBSTANCE NOTES: See Other Material Notes.

### IRON OXIDE (IRON OXIDE)

ID: 1317-61-9

%: **33.3000**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Black pigment**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

MAK

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

SUBSTANCE NOTES: See Other Material 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.*

### VOC EMISSIONS

**CDPH Standard Method V1.1 - Not tested**

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2018-02-**

EXPIRY DATE:

CERTIFIER OR LAB: **-**

APPLICABLE FACILITIES: **-**

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CERTIFICATE URL:

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

Ranges are given for each material to cover all variations from the Betomix Plus® product series (colors and ingredients and weight percentages).

## Section 6: References

### MANUFACTURER INFORMATION

MANUFACTURER: **Daubois Products Inc.**

CONTACT NAME: **Technical Center**

## KEY

<b>OSHA MSDS</b>	Occupational Safety and Health Administration Material Safety Data Sheet
<b>GHS SDS</b>	Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

## Hazard Types

<b>AQU</b> Aquatic toxicity	<b>GLO</b> Global warming	<b>PHY</b> Physical Hazard (reactive)
<b>CAN</b> Cancer	<b>MAM</b> Mammalian/systemic/organ toxicity	<b>REP</b> Reproductive toxicity
<b>DEV</b> Developmental toxicity	<b>MUL</b> Multiple hazards	<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>OZO</b> Ozone depletion	<b>LAN</b> Land Toxicity
<b>GEN</b> Gene mutation	<b>PBT</b> Persistent Bioaccumulative Toxic	<b>NF</b> Not found on Priority Hazard Lists

## GreenScreen (GS)

<b>BM-4</b> Benchmark 4 (prefer-safer chemical)	<b>LT-P1</b> List Translator Possible Benchmark 1
<b>BM-3</b> Benchmark 3 (use but still opportunity for improvement)	<b>LT-1</b> List Translator Likely Benchmark 1
<b>BM-2</b> Benchmark 2 (use but search for safer substitutes)	<b>LT-UNK</b> List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
<b>BM-1</b> Benchmark 1 (avoid - chemical of high concern)	<b>NoGS</b> Unknown (no data on List Translator Lists)
<b>BM-U</b> Benchmark Unspecified (insufficient data to benchmark)	

## Recycled Types

<b>PreC</b> Preconsumer (Post-Industrial)
<b>PostC</b> Postconsumer
<b>Both</b> Both Preconsumer and Postconsumer
<b>Unk</b> Inclusion of recycled content is unknown
<b>None</b> 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.*