Safety Data Sheet (SDS)

Product: Concrete Masonry Unit (CMU or Block)

SDS No: 001 Preparation Date: 04/22/2015

Version No.: 1.0 Revision Date: Not Applicable (N/A)

SECTION 1. IDENTIFICATION OF THE MIXTURE AND SUPPLIER

1.1 Product Identifier:

Product name:

Concrete Masonry Unit (CMU or Block)

Product code:

Various

Formula:

Mixture

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Relevant identified uses:

Construction

Uses advised against:

Any use other than those recommended

1.3 Details of the supplier of the safety data sheet:

Manufacturer/Supplier

A-1 Block Corporation

Street Address

1617 S Division Ave, Orlando, FL

Country ID/Postcode

USA/32805

Customer service telephone:

407-422-3768

E-mail address (competent person)

Brad@a1block.com

1.4 Emergency telephone number:

Emergency telephone number:

407-422-3768

Hours available:

Monday Thru Friday 5:30am - 5:00pm

After Hours, dail 911

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the mixture:

Concrete Masonry Units (CMU) are defined by OSHA as an article (under normal conditions, no more than minute or trace amounts of a hazardous chemicals are released and the article does not pose a physical hazard or health risk to employees).

No SDS is required for articles; however, this SDS is provided to communicate hazards associated where activities related to the CMU Block (cutting, grinding, crushing, drilling or breaking) may result in the release of a hazardous substance in DUST.

GHS Classification(s) for CMU Block according to OSHA Hazard Communication Standard (29 CFR 1910.1200) under normal handling conditions:

None

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GHS Classification(s) for dust generated from cutting, grinding, crushing, drilling or breaking of CMU Block according to OSHA Hazard Communication Standard (29 CFR 1910.1200) under use conditions that may result in the release of hazardous substances:

Skin Corrosion/Irritation, Category 2 (H315)

Eye Damage/Irritation, Category 2 (H319)

Specific Target Organ Toxicity-Repeated Exposure (STOT-RE), Category 1 (H372)

Note: The CMU dust classifications are based on (1) individual ingredient classifications (i.e., Silica Sand [SiO₂], Limestone, Portland Cement, Fly Ash, etc.), (2) the final chemical composition of the CMU Block (based on cement chemistry) and (3) the form of the material (dust). Further, the Specific Target Organ Toxicity-Repeat Exposure is a conservative classification based on the potential presence of respirable crystalline silica. Headwaters has not performed analysis for the presence of respirable crystalline silica under these handling conditions.

Additional information:

For full text of GHS Hazard statements (H-statements) and associated Precautionary statements (P-statements), see below.

2.2 Label elements

The Hazard Pictograms, Signal Word and Precautionary Statements only apply to activities that may release hazardous substances from the CMU (i.e., cutting / grinding / crushing / drilling / breaking).

No Hazard Pictograms, Signal Word or Precautionary Statements are applicable to the CMU Block.

Hazard Pictograms that apply to the dust generated from cutting, grinding, crushing, drilling or breaking of the CMU Block:





Signal Word:

Danger

Hazard Statements:

(For CMU Dust

Generated from Cutting,

Grinding, Crushing, Drilling or Breaking)

Precautionary Statements:

(For CMU Dust

Generated from Cutting,

Grinding, Crushing, Drilling or Breaking) P260: Do not breathe dust.

inhalation exposure.

H315: Causes skin irritation.

H319: Causes eye irritation.

P270: Do not eat, drink or smoke while using this product.

H372: Causes damage to lungs through prolonged or repeated

P271: Use only outdoors or in a well-ventilated area.

P264: Wash thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302 + P352: IF ON SKIN: Wash with plenty of water.

P304 + P340: IF INHALED: Remove person to fresh air and keep

comfortable for breathing.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing.

P314: Get medical advice/attention if you feel unwell.

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P321: See the SDS for specific treatment.

P332 + P313: If skin irritation occurs, get medical advice/attention.
P337 + 313: If eye irritation persists, get medical attention.
P362 + P364: Take off contaminated clothing and wash before

reuse.

P501: Dispose of generated dust in accordance with local / regional /

national / international regulations.

2.3 Other hazards related to CMU dust generated from cutting, grinding, crushing, drilling or breaking:

Listed Carcinogens: Silica dust (respirable, crystalline fraction) in the form of quartz.

IARC: Yes NTP: Yes OSHA: No Other: No (European Union)

Hazardous Properties: Dust generated from cutting, grinding, crushing, drilling or breaking may

cause eye damage and skin irritation. May be irritating to respiratory tract. Respirable crystalline silica may cause damage to lungs upon

repeated inhalation exposures.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Description of the mixture:

The product is a solid concrete block that, when subjected to cutting, grinding, crushing, drilling or breaking, may form hazardous dusts.

3.2 Hazardous Ingredients:

Name	CAS No.	Weight %	GHS Classification per OSHA Hazard Communication (29 CFR 1900.1200)
Silica dioxide (quartz)	14808-60-7	0-90%	STOT-RE, Category 1 (H372)*
Portland Cement	65597-15-1	8-15%	Skin Corrosion/Irritation, Category 2 (H315) Eye Damage/Irritation, Category 1 (H318) STOT-Single Exposure. Category 3 (H335)

^{*} The Specific Target Organ Toxicity-Repeat Exposure (STOT-RE) is a conservative classification based on the presence/potential presence of respirable crystalline silica.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures:

Inhalation: If dust generated from cutting, grinding, crushing, drilling or breaking is

inhaled, remove person to fresh air and keep comfortable for breathing. Get

medical attention if respiratory symptoms persist.

Skin contact: If dust generated from cutting, grinding, crushing, drilling or breaking is on skin,

wash with soap and water. Get medical advice/attention if irritation

occurs/persists.

Eye contact: If dust generated from cutting, grinding, crushing, drilling or breaking is in eyes.

rinse cautiously with water for several minutes. Get medical advice/attention if

irritation occurs/persists.

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Ingestion:

No specific first aid measures are required.

4.2 Most important health effects related to CMU dust generated from cutting, grinding, crushing, drilling or breaking, both acute and delayed:

Acute effects:

Direct exposure to dust generated from cutting, grinding, crushing, drilling or breaking may cause eye damage/irritation, skin irritation and respiratory irritation. Dust can dry and irritate the skin and cause dermatitis. Can irritate

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eyes and skin through mechanical abrasion.

Delayed effects:

Chronic exposure to inhaled dust generated from cutting, grinding, crushing, drilling or breaking may cause lung damage from repeated exposure. Chronic inhalation of dusts containing free crystalline silica may result in silicosis.

4.3 Indication of any immediate medical attention and special treatment needed:

Seek first aid or call a doctor if contact with dust generated from cutting, grinding, crushing, drilling or breaking with eyes occurs and irritation remains after rinsing.

SECTION 5. FIREFIGHTING MEASURES

5.1 Extinguishing Media:

Suitable extinguishing media:

Product is not flammable. Use extinguishing media

appropriate for surrounding fire.

Unsuitable extinguishing media:

Not applicable; the product is not flammable.

5.2 Special hazards arising from the substance or mixture:

Hazardous combustion products:

None known.

5.3 Advice for firefighters:

Special protective equipment and

precautions for firefighters:

As with any fire, wear self-contained breathing apparatus. MSHA/NIOSH (approved or equivalent) and full protective

gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures associated with CMU dust generated from cutting, grinding, crushing, drilling or breaking:

For Non-Emergency Personnel:

Protective equipment:

In case of exposure to dust generated from cutting, grinding, crushing, drilling or breaking, wear specified protective

equipment. (See Section 8).

Emergency procedures:

Avoid the creation of dust generated from cutting, grinding,

crushing, drilling or breaking. Use scooping,

water/flushing/misting or vacuum cleaning systems. Wet methods of cutting, grinding, crushing, drilling or breaking are

the preferred method of controlling dust.

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For Emergency Responders:

Protective equipment:

In case of exposure to dust generated from cutting, grinding, crushing, drilling or breaking, wear specified protective equipment. In case of fire, use self-contained breathing

apparatus with full face mask.

6.2 Environmental Precautions

Discard any product or dust residue in compliance with local regulations.

6.3 Methods and material for containment and cleaning up:

For containment and

cleaning up:

After cutting, grinding, crushing, drilling or breaking activities, use scooping, water spraying/flushing/misting or ventilated vacuum cleaning system to clean up dust generated from cutting, grinding. crushing, drilling or breaking. Use closed containers. Do not use pressurized air to clean dust.

Other information:

Take measures to avoid dust formation during cutting, grinding,

crushing, drilling or breaking activities.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Protective measures:

Avoid contact with dust generated from cutting, grinding, crushing, drilling or breaking with skin, eyes, and clothing. Avoid breathing dust. Wash thoroughly after handling. Wet methods of cutting, grinding, crushing, drilling or breaking are the preferred method of controlling dust.

Measures to prevent

fires:

Not applicable; material is non-flammable.

Measures to prevent dust

generation:

Vacuum, scoop, or use water mist/spray/flush to remove generated dust during cutting, grinding, crushing, drilling or breaking activities. Do not use pressurized air. Wet methods of cutting, grinding, crushing, drilling or breaking are the preferred method of controlling dust.

Measures to protect the environment:

Not applicable; material is not an environmental hazard.

Advice on general occupational hygiene: Practice good housekeeping. Avoid formation of dust generated from cutting, grinding, crushing, drilling or breaking. Do not breathe dust. Use adequate exhaust ventilation, dust collection and/or water mist to maintain airborne dust concentrations below permissible exposure limits. Respirable crystalline silica dust may be in the air without a visible dust cloud. In case of insufficient ventilation, wear a NIOSH approved respirator for silica dust when using, handling, storing or disposing dust from this product. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. Maintain and test ventilation and dust collection equipment. Wash or vacuum clothing that has become dusty. Avoid eating, smoking, or drinking while handling the material.

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7.2 Conditions for safe storage, including any incompatibilities:

Storage conditions:

Minimize dust produced during loading and unloading.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters applicable to CMU dust generated from cutting, grinding, crushing, drilling or breaking:

United States

OCCUPATIONAL EXPOSURE LIMITS FOR HAZARDOUS SUBSTANCES IN THE WORKPLACE						
SUBSTANCE		OSHA PEL TWA / STEL (mg/m³)	NIOSH REL TWA / STEL (mg/m³)	ACGIH TLV TWA / STEL (mg/m³)	CAL - OSHA PEL (mg/m³)	
Calcium Oxide		5	2	2	-	
	Total Quartz	30 ÷ (%SiO₂+2) (Total Quartz)	-	-	0.3	
Crystalline Silica	Respirable Crystalline Silica	10 ÷ (%SiO ₂ +2)	0.05	0.025 (a-quartz & cristobalite)	0.1	
	Cristobalite	æ	0.05	0.025 (a-quartz & cristobalite)	0.05 (respirable)	
Particulates Not Otherwise Regulated	Total	15	15		10	
	Respirable	5	5	M.C.	5	

8.2 Exposure controls:

8.2.1. Exposure Controls

Engineering controls:

Ventilation should be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Use general and local exhaust ventilation and dust collection systems as necessary to minimize exposure to dust generated from cutting, grinding, crushing, drilling or breaking. Wet methods of cutting, grinding, crushing, drilling or breaking are the preferred method of controlling dust.

8.2.2. Personal Protective Equipment

Respiratory protection:

Wear a NIOSH/MSHA approved particulate respirator if exposure to dust generated from cutting, grinding, crushing, drilling or breaking is unavoidable and where occupational exposure limits may be exceeded. If airborne dust exposures exceed the PEL or TLV, a selfcontained breathing apparatus or airline respirator is recommended.

Eye and face protection:

If eye contact with dust generated from cutting, grinding, crushing, drilling or breaking is anticipated, wear protective glasses with side shields. Avoid contact lenses.

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Wear gloves and protective clothing to minimize skin contact with dust Hand and skin protection:

generated from cutting, grinding, crushing, drilling or breaking. Wash

hands with soap and water after contact with material.

Foot protection: Wear American National Standards Institute (ANSI) approved hard-

toed safety shoes when handling CMUs.

8.2.3. Environmental Exposure Controls

Instructions to prevent

exposure:

No special requirements. Discard any product or dust residue in compliance with local regulations. Wet methods of cutting, grinding, crushing, drilling or breaking are the preferred method of controlling

dust.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Property	Value	Property	Value
Appearance:	Solid Block	Lower Explosive Limit (LEL):	Not applicable
Odor	Odorless	Vapor Pressure (Pa):	Not applicable
Odor threshold	Not applicable	Vapor Density:	Not applicable
pH (25°C):	Not available	Relative Density/Specific Gravity:	2.2 – 2.8
Melting/Freezing Point (°C):	Not applicable	Water Solubility:	Negligible
Initial Boiling Point (°C):	Not applicable	Partition Coefficient: <i>n</i> -octanol/water:	Not applicable
Boiling Range (°C):	Not applicable	Auto-ignition Temperature (°C):	Not applicable
Flash Point(°C):	Not applicable	Decomposition Temperature (°C):	Not available
Evaporation Rate:	Not applicable	Viscosity:	Not applicable
Flammability (solid, gas):	Not combustible	Explosive Properties:	Not applicable
Upper Explosive Limit (UEL):	Not applicable	Oxidizing Properties:	Not applicable

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity Stable inert material

10.2 Chemical stability Stable inert material

10.3 Possibility of hazardous reactions None known.

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10.4 Conditions to avoid None known

10.5 Incompatible materials None known

10.6 Hazardous decomposition products None known

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Acute toxicity: No data is available on the CMU dust generated from cutting, grinding,

crushing, drilling or breaking. No ingredients within the mixture exhibit

acute toxicity.

Skin corrosion/irritation: Contact with dust may cause skin irritation.

Serious eye damage /

irritation:

Eye Irritant. Eye contact with dust generated from cutting, grinding,

crushing, drilling or breaking may cause eye irritation.

Respiratory or skin

sensitization:

No data is available on the CMU dust generated from cutting, grinding,

crushing, drilling or breaking. No ingredients exhibit sensitization

effects.

Germ cell mutagenicity: No data is available on the CMU dust generated from cutting, grinding,

crushing, drilling or breaking. No ingredients exhibit mutagenic

effects.

Carcinogenicity: No data is available on the CMU dust generated from cutting, grinding,

crushing, drilling or breaking. Crystalline silica (respirable) has been

identified as a carcinogen by IARC and NTP.

Reproductive toxicity: No data is available on the CMU dust generated from cutting, grinding,

crushing, drilling or breaking. No ingredients exhibit reproductive

toxicity.

STOT single exposure: No data is available on the CMU dust generated from cutting, grinding.

crushing or drilling.

STOT repeated exposure: No data is available on the repeated inhalation of CMU dust generated

from cutting, grinding, crushing, drilling or breaking. Repeated inhalation of CMU dust generated from cutting grinding, crushing or breaking may cause lung damage if respirable crystalline silica is present. Crystalline silica (respirable) has been shown to cause

silicosis after repeated exposure.

Aspiration hazard: Not applicable, the material is a not a liquid.

SECTION 12. ECOLOGICAL INFORMATION

No data available on the CMU dust generated from cutting, grinding, crushing, drilling or breaking.

SECTION 13. DISPOSAL CONSIDERATIONS

Considered a non-hazardous waste. Follow applicable federal, state and local regulations.

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SECTION 14. TRANSPORT INFORMATION

Regulatory Entity

US DOT

Shipping Name

Not regulated

Hazard Class

Not regulated

ID Number

Not regulated

Packing Group

Not regulated

SECTION 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations / legislation specific to the mixture:

United States Regulations

Toxic Substances Control Act (TSCA) Inventory Status

All components of this product are listed on the TSCA Inventory

or are exempt from listing.

SARA (Section 311/312)

Reactive Hazard

No

Pressure Hazard

No

Fire Hazard

No

Immediate/Acute Toxicity

No

Delayed/Chronic Toxicity

Yes – respirable crystalline silica

SARA Section 313 Information:

This product does not contain any toxic chemicals listed under

313 of the Emergency Planning and Community Right-to-Know

Act of 1986 (EPCRA).

Clean Air Act (CAA)

This product does not contain any toxic chemicals listed under

the CAA at concentrations greater than 0.1%.

Volatile Organic Compounds

(VOCs)

VOC Content (weight %).

0 wt. %

Remarks:

Estimated

State Right-to-Know Status

California Prop. 65:

Crystalline Silica.

Massachusetts:

Silica, Crystalline-Quartz; Calcium oxide; Calcium

carbonate (Limestone); Portland

cement; Iron oxide dust.

New Jersey

Silica, Crystalline-Quartz; Calcium oxide; Calcium

carbonate (Limestone); Cement, Portland, Chemicals; Iron oxide.

Pennsylvania:

Quartz (silica dioxide): Calcium oxide; Calcium carbonate

(Limestone); Cement, Portland,

Chemicals: Iron oxide.

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Dispose of all waste product and containers in accordance with federal, state and local regulations.

SECTION 16. OTHER INFORMATION

16.1 Indication of changes:

Initial SDS prepared on 04-07-2015

16.2 Abbreviations and acronyms:

ANSI: American National Standards Institute

CAA: Clean Air Act

Cal/OSHA: California Department of Industrial Relations - Division of Occupational Safety and

Health

CAS: Chemical Abstract Service Registry Number

CFR: Code of Federal Regulations
CMU: Concrete Masonry Unit

CWA: Clean Water Act

GHS: Globally Harmonized System of Classification and Labeling

HMIS: Hazardous Materials Identification System IARC: International Agency for Research on Cancer

LEL: Lower explosive limit

MSHA: Mine Safety and Health Administration

NA: Not Applicable

NIOSH: National Institute of Occupational Safety and Health

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

Pa: Pascal

PEL: Permissible exposure limit

SARA: Superfund Amendments and Reauthorization Act

SDS: Safety data sheet

STEL: Short-term exposure limit

STOT-RE: Specific target organ toxicity-repeated exposure STOT-SE: Specific target organ toxicity-single exposure

TLV: Threshold limit value

TSCA: Toxic Substances Control Act
TWA: Time-weighted average
UEL: Upper explosive limit
USA: United States of America

US DOT: United States of Department of Transportation

VOC: Volatile organic compound

16.3 Other hazards:

Hazardous Materials Identification System (HMIS)

Degree of hazard: 0 = low, 4 = extreme

Health: 1* Flammability: 0 Reactivity: 0

Personal Protection: B

^{*} Dust generated from cutting, grinding, crushing, drilling or breaking activities may result in a chronic health hazard (Category 3 Health Hazard)

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Disclaimer:

This SDS has been prepared in accordance with the Hazard Communication Rule 29 CFR 1910.1200. Information herein is based on data considered to be accurate as of date prepared. No warranty or representation, express or implied, is made as to the accuracy or completeness of this data and safety information. No responsibility can be assumed for any damage or injury resulting from abnormal use, failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.

- End of Safety Data Sheet (SDS) -