SAFETY DATA SHEET



1. Identification

Product identifier NARMAG CB MORTAR

Other means of identification

Brand Code 083B

Recommended use For Industrial Use Only

Recommended restrictionsUsers should be informed of the potential presence of respirable dust and respirable crystalline

silica as well as their potential hazards. Appropriate training in the proper use and handling of this

material should be provided as required under applicable regulations.

Manufacturer/Supplier information

Manufacturer

Company name HarbisonWalker International

Address 1305 Cherrington Parkway, Suite 100

Moon Township, Pennsylvania 15108 US

Telephone General Phone: 412-375-6600

Website www.thinkHWI.com

Emergency phone number CHEMTREC 24 HOUR 1-800-424-9300

EMERGENCY #

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Carcinogenicity Category 1A

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement May cause cancer.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Wear protective gloves/protective clothing/eye protection.

Response If concerned: Get medical advice/attention.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information Users should be informed of the potential presence of respirable dust and respirable crystalline

silica as well as their potential hazards. Overexposure to the respirable dust of crystalline silica (quartz or cristobalite, less than or equal to 5 microns in size) may lead to silicosis in humans, which is a progressive and irreversible lung disease. Appropriate training in the proper use and

handling of this material should be provided as required under applicable regulations.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Magnesium Oxide		1309-48-4	80 - 90
Kaolin		1332-58-7	2.5 - 10

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Chemical name	Common name and synonyms	CAS number	%
Quartz (SiO2)		14808-60-7	1 - 2.5
Aluminium Oxide (Non-Fibrous)		1344-28-1	0.1 - 1
Other components below reportable levels			2.5 - 10

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Move to fresh air. Call a physician if symptoms develop or persist. Inhalation

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists. **Eve contact** Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

Dusts may irritate the respiratory tract, skin and eyes. Coughing.

Rinse mouth. Get medical attention if symptoms occur. Ingestion

Most important

symptoms/effects, acute and

delaved

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information

If concerned: Get medical advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials. Not available.

Specific hazards arising from

the chemical

Not applicable.

Special protective equipment and precautions for firefighters

Not available.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Stop the flow of material, if this is without risk, Collect dust using a vacuum cleaner equipped with HEPA filter.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Avoid the generation of dusts during clean-up. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Do not breathe dust. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

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8. Exposure controls/personal protection

Occupational exposure limits

Components	s for Air Contaminants (29 CFR 1910.1000) Type	Value	Form	
Kaolin (CAS 1332-58-7)	PEL	5 mg/m3	Respirable fraction.	
		15 mg/m3	Total dust.	
Magnesium Oxide (CAS 1309-48-4)	PEL	15 mg/m3	Total particulate.	
US. OSHA Table Z-3 (29 C Components	FR 1910.1000) Туре	Value	Form	
Quartz (SiO2) (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.	
		0.1 mg/m3	Respirable.	
		2.4 mppcf	Respirable.	
US. ACGIH Threshold Lim			F	
Components	Туре	Value	Form	
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.	
Magnesium Oxide (CAS 1309-48-4)	TWA	10 mg/m3	Inhalable fraction.	
Quartz (SiO2) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.	
US. NIOSH: Pocket Guide	to Chemical Hazards			
Components	Туре	Value	Form	
Kaolin (CAS 1332-58-7)	TWA	5 mg/m3	Respirable.	
		10 mg/m3	Total	
Quartz (SiO2) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.	
logical limit values	No biological exposure limits noted for the	e ingredient(s).		
oosure guidelines	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.			
oropriate engineering ntrols	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation or other engineering controls to maintain airborne levels below recommended exposure limits. I exposure limits have not been established, maintain airborne levels to an acceptable level. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.			
ividual protection measure	s, such as personal protective equipment			
Eye/face protection	Chemical respirator with organic vapor ca	artridge, full facepiece, dust	and mist filter.	
Skin protection Hand protection	Wear appropriate chemical resistant glov	es.		
Other	Use of an impervious apron is recommen			
Respiratory protection	Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.			
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.			
neral hygiene	Always observe good personal hygiene measures, such as washing after handling the material			

and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

9. Physical and chemical properties

Appearance

considerations

Physical state Solid.

Form Solid Powder.
Color Not available.
Odor Not available.

Not available. Odor threshold Not available. Ha Melting point/freezing point Not available. Initial boiling point and boiling Not available.

range

Not available. Flash point **Evaporation rate** Not available. Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

Not available.

(%)

Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available. Not available. Vapor pressure Not available. Vapor density Relative density Not available. Solubility(ies)

Solubility (water) Partition coefficient

Not available. Not available.

(n-octanol/water)

Not available. **Auto-ignition temperature** Not available. **Decomposition temperature** Not available. **Viscosity**

10. Stability and reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport. Reactivity

Material is stable under normal conditions. **Chemical stability**

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Phosphorus. Chlorine.

Incompatibility is based strictly upon potential theoretical reactions between chemicals and may

not be specific to industrial application exposure. Contact your sales representative for

clarification.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Dust may irritate respiratory system. Prolonged inhalation may be harmful.

Skin contact Dust or powder may irritate the skin.

Eye contact Dust may irritate the eyes.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Dusts may irritate the respiratory tract, skin and eyes. Coughing.

Information on toxicological effects

Not available. Acute toxicity

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Direct contact with eyes may cause temporary irritation. Serious eye damage/eye

irritation

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Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

This product is not expected to cause skin sensitization. Skin sensitization

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica Carcinogenicity

inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial

circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory

occupational exposure limits. May cause cancer. Occupational exposure to respirable dust and

respirable crystalline silica should be monitored and controlled.

IARC Monographs. Overall Evaluation of Carcinogenicity

Quartz (SiO2) (CAS 14808-60-7) 1 Carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

Quartz (SiO2) (CAS 14808-60-7) Known To Be Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

The product is not classified as environmentally hazardous. However, this does not exclude the **Ecotoxicity**

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

No data is available on the degradability of this product. Persistence and degradability

No data available. Bioaccumulative potential Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

This product, in its present state, when discarded or disposed of, is not a hazardous waste **Disposal instructions**

> according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria

for hazardous waste.

Not applicable. Hazardous waste code Not available. Waste from residues / unused

products

Contaminated packaging Not available.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to

Not applicable.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All chemical substances in this product are listed on the TSCA

chemical substance inventory where required.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Immediate Hazard - No **Hazard categories**

Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed

US. Massachusetts RTK - Substance List

Kaolin (CAS 1332-58-7)

Magnesium Oxide (CAS 1309-48-4)

Quartz (SiO2) (CAS 14808-60-7)

US. New Jersey Worker and Community Right-to-Know Act

Kaolin (CAS 1332-58-7)

Magnesium Oxide (CAS 1309-48-4) Quartz (SiO2) (CAS 14808-60-7)

US. Pennsylvania Worker and Community Right-to-Know Law

Kaolin (CAS 1332-58-7)

Magnesium Oxide (CAS 1309-48-4) Quartz (SiO2) (CAS 14808-60-7)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

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US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Quartz (SiO2) (CAS 14808-60-7) Listed: October 1, 1988 Titanium Dioxide (CAS 13463-67-7) Listed: September 2, 2011

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 05-24-2015

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Disclaimer This information is based on our present knowledge on creation date. However, this shall not

constitute a guarantee for any specific product features and shall not establish a legally valid

contractual relationship.

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