Material Safety Data Sheet

1. Product & Company Identification

Manufacturer's Name: CMS Industries, Inc.

PO Box 60

Orchard Park, NY 14127

716-667-2321

Product Names: HEAT STOP 50, HEAT STOP II

Common Name: Refractory Mortar

CAS NO: Mixture

Revision Date: February 3, 2012

2. Hazards Identification

Potential Health Effects	**Acute**	**Chronic**
Eyes	Eye irritation, eye abrasion. **Serious eye injury can occur due to abrasion from rubbing eyes!!**	Not known.
Skin	Dry skin, skin irritation, alkali burns and allergic dermatitis in hypersensitive individuals.	Dry skin, skin irritation, alkali burns and allergic dermatitis in hypersensitive individuals.
Inhalation	Irritation or inflammation to the linings of the upper respiratory tract.	Over-exposure to crystalline silica over a period of years may lead to silicosis (a permanent and sometimes fatal lung disease) and possibly lung cancer. This product may aggravate existing respiratory conditions.
Improper Dry-out	Physical injury due to steam spalling or explosion of cured product.	Not known.
Toxicological information	None found.	None found.

3. Composition/Information on Hazardous Ingredients

Name	CAS-No.	Weight%	OSHA/PEL	ACGIH TLV	Carcinogen
Crystalline Silica Forms	As below				NTP-yes IARC-Group -1
Quartz	14808-60-7	5 - 15	0.10mg/M^3 (resp)	0.10 mg/M^3 (resp)	
Cristobalite	14464-46-1	0 - 5	0.05 mg/M^3 (resp)	0.05 mg/M^3 (resp)	
Tridymite	15468-32-3	Not detected	0.05 mg/M^3 (resp)	0.05 mg/M^3 (resp)	
Calcium Aluminate Cement	65997-16-2	10 - 30	15 mg/M^3 (total)	Not found	No

These products are composed of a blend of processed alumina-silicate earth minerals (including calcined and uncalcined clays and aggregates) that are bonded by a hydratable cement which when mixed with water forms a hard mortar similar to that used in commercial construction. Dust generated during manufacture, installation and tear-out may pose a respiratory hazard if exposure is sufficient.

4. First Aid Measures

Inhalation: Remove to fresh air. Give CPR and Oxygen if needed.

Eye Contact:	Flush eyes with water or eyewash solution for 15 minutes and get prompt medical attention if relief is not obtained immediately. DO NOT RUB EYES!!! Injury due to abrasion may result.
Skin Contact:	Wash irritated areas gently with soap and water to avoid abrasion. Skin lotion may relieve irritation. If irritation is not relieved within several hours consult a physician.

5. Fire Fighting Measures

Flammable Properties:	Non-flammable; no applicable flash point.
Explosion Hazards:	Hardened concrete which has not been properly dried is subject to explosion upon rapid heating due to internal steam pressure.

6. Accidental Release Measures

Personal Precautions:	Dust generated during manufacture, installation and tear-out may pose a respiratory hazard if exposure is sufficient.
Methods for Clean Up:	All personnel engaged in cleanup should adhere to the instruction outlined in Section 8 for personal protection.

7. Handling and Storage

Handling:	Care should be exercised to prevent generation of dust during handling, installation, use and tear-out. Avoid skin and eye contact and breathing of dust. Proper refractory practices must be followed for curing, dry-out and firing to service temperature.
Storage:	Store in a dry area away from extreme heat.

8. Exposure Controls and Personal Protection

Appropriate control measures include dust prevention, dust containment and ventilation supplemented by the use of appropriate NIOSH approved respirators for the exposure conditions.

Safety glasses, impervious gloves, boots and protective clothing should be used as needed.

Wash skin and clothing with soap and water after contact with material.

Clean-up of spills should be done in a way to minimize dust, including vacuuming and wet methods.

9. Physical and Chemical Properties

Appearance:	Brown to buff colored, granular	Melting Point:	Greater than 2,000^{o}F
Physical State:	Solid	Water Solubility:	Negligible
Odor:	No distinct odor	pH:	Slightly basic

Density (as shipped): Specific gravity= 2.0-3.0 (water =1)

10. Stability and Reactivity

Stability: When combined with water – hardens in 1 to 8 hours with evolution of moderate heat.

Chemical Reactivity: No other known hazardous reactions, decomposition products or polymerization.

11. Toxicological Information

Toxicity: None found.

12. Ecological Information

This product is composed primarily of earth minerals and is not expected to have an ecotoxic effect other than that associated with the lime in the cement.

13. Disposal Considerations

Disposal of Product: Dispose in accordance with federal, state and local regulations. Dispose per 40 CFR 261 and 262.

14. Transport Information

U.S.A. DOT: This product is not DOT classified.

15. Regulatory Information

<u>International Inventories</u>
Canadian WHMIS – D2A

<u>U.S. Federal Regulations</u>
EPCRA Section 302 (Extremely Hazardous Substances) – Not listed.
CERCLA Section 304 (Title III) – Not subject to reporting.
OSHA 29 CFR 1910.1200 – Considered hazardous.
SARA 313: Not subject to reporting.
SARA Hazard Category: "Chronic Health Hazard"
California: California Proposition 65: This product contains crystalline silica, a chemical known to the State of California to cause cancer.
Other States: Crystalline silica products are not known to be regulated by states other than California; however, state and local OSHA & EPA regulations may apply to these products. Contact your local agency if in doubt.

16. Other Information

MSDS Status: Replaces all prior MSDS.

Note: This material safety data sheet contains confidential proprietary information and is not to be disclosed to the general public or to competition except as required by law. The information accumulated herein is believed to be accurate but is not warranted to be,

whether originating with CMS Industries, Inc. or not. This information is offered solely for use in your evaluation of this product in respect to safety, health, and environment hazards.

This information is given in good faith. Suitability of the product for the application and installation conditions is critical to the safety of the product. These conditions are subject to the control of the user and all risks of use of the product are assumed by the user. For guidance on use in specific applications consult CMS Industries, Inc.