

MAY 08 1997



# MSDS

Material Safety Data Sheet

## PRODUCT NAME: MORTAR CEMENT

### 1. CHEMICAL PRODUCT & COMPANY

**Supplier**  
 Name: Lafarge Corporation  
 Address: 11130 Sunrise Valley Drive  
 Reston, VA 20191-4393  
 Telephone: 703-264-3600

**Product Identifier**  
 Masonry Cement, Mortar Mix, Mortar Cements, Parging Mix, Type M, N, S Cement

Note: This MSDS covers many products. Individual composition of hazardous constituents will vary.

WHMIS Classification: D2A, E

**Emergency Telephone Numbers**  
 Health: CHEMTREC 1-800-424-9300  
 Transportation: CHEMTREC 1-800-424-9300

### 2. INFORMATION ON COMPONENTS

Component Name	%	CAS No.
Calcium Carbonate	30 - 50	1317-85-3
Tri-Calcium Silicate	10 - 40	12168-85-3
Di-Calcium Silicate	5 - 50	10034-77-2
Tetra-Calcium-Alumino-Ferrite	2 - 10	12068-35-8
Tri-Calcium Aluminate	1 - 15	12042-78-3
Crystalline Silica	0 - 10	14808-80-7
Calcium Sulfate	0 - 5	Various
Magnesium Oxide	0 - 2	1309-48-4
Calcium Oxide	0 - 1	1305-78-8
Chromates	0 - 0.005	Various

Component Name	EXPOSURE LIMITS	
	OSHA PEL TWA	ACGIH TLV TWA
Calcium Carbonate (Respirable Dust)	5 mg/m <sup>3</sup>	
(Total Dust)	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Portland Cement (CAS 65997-15-1) (Respirable Dust)	5 mg/m <sup>3</sup>	
(Total Dust)	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Crystalline Silica (Respirable Dust)	0.1 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>
Calcium Sulfate (Respirable Dust)	5 mg/m <sup>3</sup>	
(Total Dust)	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Magnesium Oxide	10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Calcium Oxide	5 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>
Chromates	0.1 mg(CrO <sub>3</sub> )/m <sup>3</sup>	0.05 mg(Cr)/m <sup>3</sup>
Nuisance Dust (Respirable Dust)	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
(Total Dust)	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>

### 3. HAZARD IDENTIFICATION

**Emergency Overview**  
 Solid; grey powder; odorless.

**Potential Health Effects**  
 INHALATION (acute): Breathing dust may cause nose, throat or lung irritation and choking. The described effect depends on the degree of exposure.

INHALATION (chronic): Prolonged or repeated exposure may cause lung injury including silicosis. This product may contain crystalline silica. Crystalline silica has been classified by IARC as a known human carcinogen. Some human studies indicate potential for lung cancer from crystalline silica exposure. Long term exposures which result in silicosis may result in additional health effects. Risk of injury depends on duration and level of exposure.

EYE CONTACT (acute/chronic): May cause eye irritation, burns and damage to cornea.

SKIN CONTACT (acute/chronic): May cause dry skin, redness, discomfort, irritation or burns. May produce allergic reaction potentially associated with hexavalent chromium. Thickening of the skin (scleroderma) may be associated with exposure to high levels of crystalline silica.

INGESTION (acute/chronic): Ingestion of large amounts may cause intestinal distress.

### 4. FIRST AID MEASURES

INHALATION: Move person to fresh air. Seek medical attention for discomfort.

EYE CONTACT: Rinse thoroughly with water. Seek medical attention for abrasions.

SKIN CONTACT: Wash with soap and water. Use moisturizing creams for irritated skin. Seek medical attention for burns.

INGESTION: Do not induce vomiting, but drink plenty of water. Seek medical attention for discomfort.

**4. FIREFIGHTING MEASURES**

**Flashpoint and Method:** None.

**Flammable Limits:** Not combustible.

**Autoignition Temperature:** None.

**General Hazard:** Avoid breathing dust.

**Firefighting Instructions:** Treat adjacent material.

**Firefighting Equipment:** This product is not a fire hazard. Self contained breathing apparatus is recommended to limit exposures to smoke from any combustion source.

**Hazardous Combustion Products:** None.

**5. ACCIDENTAL RELEASE MEASURES**

**General:** Wind blown dust may cause the hazards identified in Section 3. Remove spilled material to limit potential harm.

**Land Spill:** Clean up spilled material.

**Water Spill:** Clean up spilled material.

**7. HANDLING AND STORAGE**

**General:** Avoid accidental release. Store dry and away from water.

**Storage Temperature:** Unlimited.

**Storage Pressure:** Unlimited.

**Empty Containers:** Dispose of containers in an approved landfill or incinerator.

**8. EXPOSURE CONTROL & PERSONAL PROTECTION**

**Engineering Controls**  
Use exhaust ventilation to maintain dust levels below exposure limits in workplaces with poor ventilation and dusty conditions.

**Personal Protection**

**RESPIRATORY PROTECTION:** Under ordinary conditions no respiratory protection is required. Wear a NIOSH approved respirator when exposed to dust above exposure limits.

**EYE PROTECTION:** Wear glasses or safety goggles to prevent contact with eyes. Wearing contact lenses when using this product under dusty conditions is not recommended.

**SKIN PROTECTION:** Use gloves, shoes and protective clothing to prevent skin contact.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Vapor Pressure:	Not measurable
Vapor Density:	Not measurable
Specific Gravity:	3.2
Solubility in Water:	Slight (0.1 - 1.0%)
Evaporation Rate:	Not measurable
pH (in water):	12 - 13
Boiling Point:	> 1000° C
Freezing Point:	None, solid
Viscosity:	None, solid

**10. STABILITY AND REACTIVITY**

**General:** Product is stable but must be kept dry. Reacts with water forming polymerized silicates and calcium oxide.

**Incompatible Materials and Conditions to Avoid:** Must be kept dry. Dissolves in hydrofluoric acid producing corrosive silicon tetrafluoride gas. Silicates react with powerful oxidizers such as fluorine, chlorine trifluoride and oxygen difluoride.

**Hazardous Decomposition:** None, powdered solid.

**11. MSDS PREPARATION AND TOXICOLOGICAL INFORMATION**

For detailed toxicological information contact:

Environment and Government Affairs  
Lafarge Corporation  
P. O. Box 4600  
Reston, VA 20195-1415  
703-264-3600

08 1997



**Material Safety Data Sheet**

**MSDS**

Mortar Cement Page 3

**12. ECOLOGICAL INFORMATION**

For detailed ecological information:  
See Section 11 above.

**13. DISPOSAL CONSIDERATIONS**

Dispose in landfill in accordance with all applicable regulations. Any disposal practice must be in compliance with local, provincial, state and federal laws and regulations. Contact local environmental agency for specific rules.

**14. REQUIRED TRANSPORT INFORMATION**

Not a hazardous material for DOT or TDG shipping.

**15. REGULATORY**

**OSHA Hazard Communication Rule, 29 CFR 1910.1200:**

Some constituents identified in this product are considered by OSHA to be hazardous and should be included in the employer's hazard communication program.

**CERCLA/SUPERFUND, 40 CFR 117,302:**

Not listed.

**SARA TITLE III, Sections 311-312 Hazard Category:**

This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 and is considered a hazardous chemical and a delayed health hazard.

**SARA Section 313 Information:**

This product contains NONE of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

**Toxic Substance Control Act (TSCA):**

Some constituents identified in this product are listed on the TSCA Inventory.

**California Proposition 65:**

CRYSTALLINE SILICA (CAS - 14808-60-7) is considered to be a carcinogen by the state of California.

**WHMIS Information**

This product contains substances considered to be hazardous by Health Canada and is a controlled product. Consult local authorities for acceptable exposure limits. WHMIS Information - 416-327-7066.

**16. OTHER**

**Abbreviations:**

- CAS No Chemical Abstract Service number
- OSHA Occupational Safety and Health Administration
- PEL Permissible Exposure Limit
- ACGIH American Conference of Governmental Industrial Hygienists
- TLV Threshold Limit Value
- TWA Time Weighted Average (8 hour)
- CL Ceiling Limit
- mg/m<sup>3</sup> milligrams per cubic meter
- IARC International Agency for Research on Cancer
- NIOSH National Institute for Occupational Safety and Health
- pH negative log of hydrogen ion
- > greater than
- DOT U.S. Department of Transportation
- TDG Transportation of Dangerous Goods
- CFR Code of Federal Regulations
- CERCLA Comprehensive Environmental Response, Compensation and Liability Act
- SARA Superfund Amendments and Reauthorization Act
- WHMIS Workplace Hazardous Materials Information System

Revision Summary: Revised January 1997

Information in this MSDS is believed to be current and accurate at the time provided. It is the user's obligation to determine the conditions of safe use of this product.



QUIKRETE CONCRETE/GRAVEL MIX

Page 2 of 3

SECTION V - HEALTH HAZARD INFORMATION

THRESHOLD LIMIT VAL. \*\* UNKNOWN  
EFFECTS OF OVER-  
EXPOSURE \*\* SKIN - DRYING IRRITATION  
EYES, EARS, NOSE - UNPLEASANT DEPOSITS,  
IRRITATION  
CHRONIC EXPOSURE \*\* PRODUCT IS ALKALINE WHEN MIXED WITH  
WATER  
EMERGENCY & FIRST  
AID PROCEDURES \*\* SKIN: WASH WITH SOAP & WATER, APPLY  
LOTION  
EYES: WASH REPEATEDLY WITH WATER  
IF IRRITATION OR INFLAMMATION OCCURS  
SEEK MEDICAL ATTENTION

SECTION VI - REACTIVITY DATA

STABILITY \*\* STABLE  
INCOMPATIBILITY \*\* ACIDS  
HAZARD POLYMERIZATION  
MAY/MAY NOT OCCUR \*\* WILL NOT OCCUR  
COND. TO AVOID \*\* HIGH HUMIDITY WILL CAUSE MATERIAL TO  
SET

SECTION VII - SPILL/LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

\*\* SWEEP UP DISCARD IN TRASH/ NO SPECIAL  
HANDLING  
WASTE DISPOSAL METHOD \*\* WASH WITH WATER. BAGS MAY BE  
INCINERATED. BE SURE TO FOLLOW LOCAL,  
STATE, AND FEDERAL REGULATIONS.

SECTION VIII - SPECIAL PROTECTION INFO.

RESPIRATORY PROTECTION \*\* GENERAL PURPOSE DUST MASK  
VENTILATION LOCAL/  
MECH./SPECI \*\* LOCAL ADEQUATE VENTILATION  
PROTECTIVE GLOVES \*\* RUBBER OR GENERAL PURPOSE  
EYE PROTECTION \*\* SAFETY GOGGLES

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

\*\* STORE OFF GROUND IN COVERED, DRY AREA  
OTHER PRECAUTIONS \*\*

QUIKRETE CONCRETE/GRAVEL MIX

=====

THE DATA IN THIS MATERIAL SAFETY DATA SHEET RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN AND DOES NOT RELATE TO USE IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PROCESS. THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED UPON DATA BELIEVED TO BE CORRECT. HOWEVER, SINCE DATA, SAFETY STANDARDS, AND GOVERNMENT REGULATIONS ARE SUBJECT TO CHANGE AND THE CONDITIONS OF HANDLING, OR MISUSE ARE BEYOND OUR CONTROL, GIBRALTAR NATIONAL CORPORATION, MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, AND DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. USER SHOULD SATISFY HIMSELF THAT HE HAS ALL CURRENT DATA RELEVANT TO HIS PARTICULAR USE.

=====

=====

FURNISHED BY: Donna M. Zaboriski, PURCHASING MGR.  
 DATED: JANUARY 9, 1986  
 REVISED DATE: OCTOBER 19, 1994  
 DAVE ERICKSON

=====

# MATERIAL SAFETY DATA SHEET

Complies with OSHA's Hazard Communication Standard, 29 CFR 1910.1200

## IDENTITY

Magic Kote®

## N.F.P.A. & H.M.I.S. RATING

HAZARD INDEX	HAZARD CLASS		
4 = Severe	Flammability		
3 = Serious	2		
2 = Moderate	Health	Reactivity	
1 = Slight	1	1	
0 = Minimal	Special Note		

## SECTION I - MANUFACTURER

<b>SYMONS CORPORATION</b>	<b>Emergency Contact</b>
200 E. Touhy Avenue	800-424-9300
Des Plaines, IL 60018	<b>Information Contact</b>
	847-298-3200

## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

	OSHA PEL	ACGIH TLV	OTHER LIMITS	PERCENT
"Combustible Liquid" Diesel Fuel Oil				70+
	none established			

None of the remaining components of the mixture are considered Hazardous Material or carcinogens (1910.1200 Hazard Communication (d)(4)).

## TRANSPORTATION INFORMATION

**Labeling Requirements:** None per 49 CFR 172.101 table

**Marking Requirements:** Mark with proper shipping name and identification number

**DOT Classification:** Diesel Fuel Solution, NA 1993, PG III

**Placards Required:** Combustible placards required on all rail shipments over 1000 lbs, bulk shipments and 275 gallon totes

**Emergency Response Guide:** 27

**National Motor Freight (NMF-100-0):** Petroleum Oils, Greases, & Related Products.  
Item 155250 Class: LTL= 65 TL= 35

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

**Boiling Point:** 325°F

**Specific Gravity (H<sub>2</sub>O=1):** <1

Vapor Pressure (mm Hg): varies

Melting Point: NA

Vapor Density (Air = 1): 5.0

Evaporation (Butyl Acetate = 1): >10

Solubility: Negligible

Appearance: Pale yellow liquid, odor of kerosene.

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Tag Closed Cup): 158°F.

Flammable Limits: LFL: 0.7% UFL: 7.0%

Extinguishing Media: Dry chemical, foam or CO<sub>2</sub>

Special Fire Fighting Procedures: Firefighters should wear NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Explosion hazard when exposed to heat or flame. Vapor is heavier than air and can travel a considerable distance to a source of ignition and flashback.

## SECTION V - REACTIVITY DATA

Stability: Stable.

Conditions to Avoid: Heat and flame.

Incompatibility (Materials to Avoid): Oxidizers.

Hazardous Decomposition (Byproducts): Carbon monoxide, organic acids, aldehydes, and other petroleum decomposition products.

Hazardous Polymerization: Will not occur.

## SECTION VI - HEALTH HAZARD DATA

### ROUTES OF ENTRY

Inhalation? Yes      Skin? Yes      Ingestion? Not expected

### HEALTH HAZARDS (ACUTE AND CHRONIC)

Skin Contact: May cause slight irritation, dryness, cracking, defatting dermatitis.

Eye Contact: May cause irritation and redness.

Inhalation: May cause dizziness, headache, nausea, vomiting and coma if used in unventilated areas.

Ingestion: May be harmful if swallowed, irritation, vertigo - low visc product.

Can cause in the most extreme cases dermatitis, pneumonitis, pulmonary edema or kidney damage.

Carcinogenicity: Unrelated      NTP? No      IARC Monographs? No      OSHA Regulated? No

### SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, drowsiness, respiratory and skin irritation, nausea, numbness.

### EMERGENCY AND FIRST AID PROCEDURES

Skin: Remove and launder contaminated clothing as soon as possible. Extremely contaminated leather shoes should be discarded. Wash thoroughly with soap and water. If irritation persists call a physician.



Eyes: Flush with water for 20 minutes. Call a physician.

Inhalation: Remove to fresh air. Call a physician.

Ingestion: Do not induce vomiting. If vomiting begins, lower victim's head in an effort to prevent vomitus from entering lungs. Call a poison center or physician. NOTE TO PHYSICIAN: Gastric lavage by qualified medical personnel may be considered, depending upon quantity of material ingested.

**SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE**

Steps to be Taken in Case Material is Released or Spilled: Eliminate all ignition sources. Contain with earthen dike or petroleum absorbent material. Remove with grounded suction pump to a salvage container. Remove all absorbent and contaminated materials. Wash area.

Waste Disposal Method: Controlled incineration complying with federal, state and local regulations.

Precautions to be Taken in Handling and Storing: Keep away from all ignition sources (heat, flame, sparks, & strong oxidizers). Store in safety containers. Use only in well ventilated areas.

Other Precautions: Do not weld or cut empty steel drums with a torch.

**SECTION VIII - CONTROL MEASURES**

HMS Personal Protection Index: "J"

Respiratory Protection: Organic vapor cartridge or NIOSH approved supplied air respirators.

Ventilation: Local exhaust to control vapors. For special ventilation use explosion proof equipment.

Protective Gloves: Neoprene or equivalent gloves.

Eye Protection: Chemical splash goggles or face shield to protect against accidental splashes.

Other Protective Clothing or Equipment: PVC or equivalent chemically resistant apron. Safety showers and eye wash stations should be available.

Work/Hygienic Practices: Wash thoroughly with soap and water before eating, smoking or using washroom. Remove contaminated clothing and wash before reuse. Use only in well ventilated areas unless recommended respiratory protection is used. Keep body contact and splash to a minimum.

*Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, Symons Corporation makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Symons Corporation be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers.*

SYMONS CORPORATION

DATE: 9/96