

# SAFETY DATA SHEET Refractory Mortar

# **SECTION 1) IDENTIFICATION**

Product ID: Refractory Mortar

Product Name: Dry Packaged Cement-Based Product

Revision Date: Aug 02, 2023 Date Printed: Aug 02, 2023

Version: 1.1 Supersedes Date: N.A.

Manufacturer's Name: TCC Materials

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**Product/Recommended Uses:** 

# **SECTION 2) HAZARDS IDENTIFICATION**

# Classification

Carcinogenicity - Category 1A

Eye Irritation - Category 2B

Specific Target Organ Toxicity - Repeated Exposure - Category 1

# **Pictograms**



# **Signal Word**

Danger

## **Hazardous Statements - Health**

H350 - May cause cancer

H320 - Causes eye irritation

H372 - Causes damage to organs through prolonged or repeated exposure.

# **Precautionary Statements - General**

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

# **Precautionary Statements - Prevention**

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P280 - Wear protective gloves, protective clothing, eye protection/face protection.

P264 - Wash thoroughly after handling.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

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P270 - Do not eat, drink or smoke when using this product.

## **Precautionary Statements - Response**

P308 + P313 - IF exposed or concerned: Get medical advice/attention.

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

P337 + P313 - If eye irritation persists: Get medical advice/attention.

P314 - Get Medical advice/attention if you feel unwell.

## **Precautionary Statements - Storage**

P405 - Store locked up.

### **Precautionary Statements - Disposal**

P501 - Dispose of contents/container in accordance with local/national/international regulations.

## **Hazards Not Otherwise Classified (HNOC)**

None.

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS							
CAS Chemical Name GHS Classifications % By Weight							
0014808-60-7	SILICA, CRYSTALLINE	Carc. 1A, H350; STOT RE 1, H372	0.00% - 100.00%				
0065997-16-2 CEMENT, ALUMINA, CHEMICALS Eye Irr. 2B, H320 0.00% - 100.00%							

# **SECTION 4) FIRST-AID MEASURES**

#### Inhalation

Remove source of exposure or move person to fresh air and keep comfortable for breathing. Get Medical advice/attention if you feel unwell. If exposed/lf you feel unwell/lf concerned: Call a POISON CENTER/doctor.

# **Eye Contact**

If eye irritation persists: Get medical advice/attention. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face.

#### **Skin Contact**

IF exposed or concerned: Get medical advice/attention. Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. If skin irritation occurs: Get medical advice/attention. Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash contaminated clothing before re-use or discard.

#### Ingestion

Rinse mouth. If exposed/If you feel unwell/If concerned: Call a POISON CENTER/doctor.

# Most important symptoms and effects, both acute and delayed

No data available.

## Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. No specific treatment is required. No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Treat according to symptoms (decontamination, vital functions), no known specific antidote. Treatment should be supportive and based on the judgement of the physician in response to the reaction of the patient.

# **SECTION 5) FIRE-FIGHTING MEASURES**

## **Suitable Extinguishing Media**

Small Fire: Dry chemical, foam, carbon dioxide, water-spray or alcohol-resistant foam. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Large Fire: Water spray, fog or alcohol-resistant foam.

## **Unsuitable Extinguishing Media**

Do not use straight stream of water.

## **Specific Hazards in Case of Fire**

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Fire will produce irritating gases.

## **Fire-fighting Procedures**

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Cool containers with flooding quantities of water until well after fire is out. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

## **Special Protective Actions**

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

# **SECTION 6) ACCIDENTAL RELEASE MEASURES**

## **Emergency Procedure**

Evacuate and isolate hazard area and keep unauthorized personnel away. Stay uphill and/or upstream. Ventilate closed spaces before entering. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

## **Recommended Equipment**

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA).

#### **Personal Precautions**

Do not breathe vapor or mist. Do not get on skin, eyes or clothing.

## **Environmental Precautions**

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

# Methods and Materials for Containment and Cleaning up

Absorb Liquids in vermiculite, dry sand, earth, or similar inert material and deposit in sealed containers for disposal. Ventilate area after clean-up is complete.

# **SECTION 7) HANDLING AND STORAGE**

#### General

Wash hands after use. Do not get in eyes, on skin, or on clothing. Avoid breathing vapor or mist. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. Eyewash stations and showers should be available in areas where this material is used and stored All containers must be properly labelled.

#### **Ventilation Requirements**

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Report ventilation failures immediately.

#### **Storage Room Requirements**

Store in a cool, dry, well ventilated area, away from sources of ignition and incompatibilities. Keep containers securely sealed when not in use. Containers that have been opened must be carefully resealed to prevent leakage. Indoor storage should meet OSHA standards and appropriate fire codes. Empty containers retain residue and may be dangerous.

# **SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### Eye protection

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids.

## **Skin Protection**

Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Use of chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and microorganisms. Examples of preferred glove barrier materials include: Butyl rubber, Polyethylene, Chlorinated polyethylene, Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Viton, Neoprene, Polyvinyl chloride ("PVC" or "vinyl"), Nitrile/butadiene rubber ("nitrile" or "NBR").

Full contact Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 480 min

Material tested: Butoject® (KCL 897 / Aldrich Z677647, Size M).

Splash contact Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 30 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M).

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Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

# **Respiratory protection**

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

## **Appropriate Engineering Controls**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	ACGIH TWA (mg/m3)	ACGIH TWA (ppm)	ACGIH STEL (mg/m3)	ACGIH STEL (ppm)	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations	OSHA TWA (mg/m3)
CEMENT, ALUMINA, CHEMICALS	1 (R)				A4	Pneumoconiosi s; LRT irr; neurotoxicity	A4	
SILICA, CRYSTALLINE	0.025 (R)				A2	Pulmonary fibrosis; lung cancer	A2	[10 mg/m3 percent SiO2+2 / 250 percent SiO2+5 mppcf]; [30 mg/m3 percent SiO2+2];

Chemical Name	OSHA TWA (ppm)	OSHA STEL (mg/m3)	OSHA STEL (ppm)	OSHA Carcinogen	OSHA Skin designation	OSHA Tables (Z1, Z2, Z3)	NIOSH TWA (mg/m3)	NIOSH TWA (ppm)
CEMENT, ALUMINA, CHEMICALS								
SILICA, CRYSTALLINE	а					[1,3]; [3];	0.05e	

Chemical Name	NIOSH STEL (mg/m3)	NIOSH STEL (ppm)	NIOSH Carcinogen
CEMENT, ALUMINA, CHEMICALS			
SILICA, CRYSTALLINE			1

(C) - Ceiling limit, (R) - Respirable fraction, A2 - Suspected Human Carcinogen, A4 - Not Classifiable as a Human Carcinogen, irr - Irritation, LRT - Lower respiratory tract

# **SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES**

## **Physical and Chemical Properties**

Density	0.10000 lb/gal
Specific Gravity	0.01198
% Solids By Weight	100.00000%
Appearance	N/A
Appearance Odor Description	N/A N/A

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Water Solubility Soluble Flammability Will not burn N/A °F Flash Point Viscosity N/A Lower Explosion Level N/A Upper Explosion Level N/A Vapor Density N/A lb/gal Freezing Point N/A °F Melting Point N/A °F Low Boiling Point N/A °F **Evaporation Rate** N/A gal/min Coefficient Water/Oil N/A

# **SECTION 10) STABILITY AND REACTIVITY**

# **Stability**

Stable under normal storage and handling conditions.

## **Conditions To Avoid**

Avoid heat, sparks, flame and contact with incompatible materials

# **Hazardous Reactions/Polymerization**

Will not occur.

# **Incompatible Materials**

Strong bases, acids, and oxidizing agents.

## **Hazardous Decomposition Products**

Oxides of carbon.

# **SECTION 11) TOXICOLOGICAL INFORMATION**

# **Acute Toxicity**

Based on available data, the classification criteria are not met.

The Acute Toxicity Estimate (ATE) for an oral exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for a dermal exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for an inhalation (vapour) exposure to this mixture is >20 mg/l

# **Aspiration Hazard**

Based on available data, the classification criteria are not met.

# Carcinogenicity

May cause cancer

## **Germ Cell Mutagenicity**

Based on available data, the classification criteria are not met.

# **Reproductive Toxicity**

Based on available data, the classification criteria are not met.

# Respiratory/Skin Sensitization

Based on available data, the classification criteria are not met.

# **Serious Eye Damage/Irritation**

Causes eye irritation

**Skin Corrosion/Irritation** 

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Based on available data, the classification criteria are not met.

## **Specific Target Organ Toxicity - Repeated Exposure**

Causes damage to organs through prolonged or repeated exposure.

## **Specific Target Organ Toxicity - Single Exposure**

Based on available data, the classification criteria are not met.

# **Likely Routes of Exposure**

Inhalation, Ingestion, Skin contact, Eye contact

## **Chronic Exposure**

# 0014808-60-7 SILICA, CRYSTALLINE

Prolonged inhalation of respirable crystalline silica dust can result in lung disease (i.e. silicosis and/or lung cancer). Symptoms include coughing, shortness of breath, wheezing and reduced pulmonary function.

#### **Potential Health Effects - Miscellaneous**

## 0014808-60-7 SILICA, CRYSTALLINE

Is an IARC, NTP or OSHA carcinogen. Repeated overexposure to crystalline silica may lead to x-ray changes and chronic lung disease. Inhalation of high dust concentrations may cause: breathing difficulties, lung injury. WARNING: This chemical is known to the State of California to cause cancer.

# **SECTION 12) ECOLOGICAL INFORMATION**

## **Toxicity**

Based on available data, the classification criteria are not met.

## **Persistence and Degradability**

No data available.

## **Bioaccumulative Potential**

No data available.

## **Mobility in Soil**

No data available.

# **Other Adverse Effects**

No data available.

# **SECTION 13) DISPOSAL CONSIDERATIONS**

# **Waste Disposal**

It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, state and local laws. Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes.

# **SECTION 14) TRANSPORT INFORMATION**

	U.S. DOT Information	IMDG Information	IATA Information
UN Number:	Not Regulated	Not Regulated	Not Regulated
Proper shipping name:	N/A	N/A	N/A
Hazard Class:	Not Applicable	Not Applicable	Not Applicable
Packaging:	Not Applicable	Not Applicable	Not Applicable

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Hazardous substance (RQ):	No Data Available		
Marine Pollutant:	No Data Available	No Data Available	
Note / Special Provision:	No Data Available	No Data Available	No Data Available
Toxic-Inhalation Hazard:	No Data Available		

# **SECTION 15) REGULATORY INFORMATION**

# Safety, health and environmental regulations

The product has been evaluated against the following relevant regulations: U.S.A Toxic Substance Control Act (TSCA) California Proposition 65 Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312 Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313 Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103

CAS	Chemical Name	% By Weight	Regulation List
0014808-60-7	SILICA, CRYSTALLINE	0.00% - 100.00%	SARA312,TSCA,CA_Prop65 - California Proposition 65,CA_Prop65_Type_Toxicity_Cance r - CA_Proposition65_Type_Toxicity_Ca ncer
0065997-16-2	CEMENT, ALUMINA, CHEMICALS	0.00% - 100.00%	SARA312,TSCA



**WARNING:** This product can expose you to chemicals including SILICA, CRYSTALLINE, which is [are] known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

# **SECTION 16) OTHER INFORMATION**

## **Glossary**

ACGIH - American Conference of Governmental Industrial Hygienists; CAS - Chemical Abstracts Service; Chemtrec - Chemical Transportation Emergency Center; DSL - Domestic Substances List; ESL- Effects screening levels; GHS - "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations; HMIS - Hazardous Material Information Service; IATA - Dangerous Goods Regulations (DGR) for the air transport (IATA); IMDG - International Maritime Dangerous Goods Code; LC - Lethal Concentration; LD - Lethal Dose; NFPA - National Fire Protection Association; OEL - Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL - Permissible Exposure Limit; SARA 313 - Superfund Amendments and Reauthorization Act, Section 313; SCBA - Self Contained Breathing Apparatus; ppm - parts per million; STEL - Short-term exposure limit; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act Public Law 94-469; TWA - Time-weighted average; US DOT- US Department of Transportation.

#### Version 1.1:

Revision Date: Aug 02, 2023

#### Full text of H-Statements referred to under Section 3

H372 Causes damage to organs through prolonged or repeated exposure.

H320 Causes eye irritationH350 May cause cancer

## **DISCLAIMER**

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

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