SAFETY DATA SHEET



Issue Date: August 21, 2014 Revision Date: June 25, 2018 Version: 2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Kemplate

Other Means of Identification

SDS #: F4010

Recommended Use: Metallic dry shake hardener

Restrictions on Use: No Data

Supplier of the Safety Data Sheet including Address:

ChemMasters Inc. 300 Edwards Street Madison, OH 44057

Telephone Numbers

Company Phone Number Phone: 800-486-7866, 440-428-2105

Fax: 440-428-7091

Emergency Telephone: ChemTrec 800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards:

Harmful if swallowed, causes severe skin burns and eye damage, suspected of causing cancer by inhalation of respirable crystalline silica, may cause respiratory irritation, may cause damage to lungs through prolonged or repeated exposure by inhalation, and may cause an allergic skin reaction.

Target Organs: Lungs

GHS Classification:

Acute Toxicity Oral – Category 4
Carcinogenicity – Category 2
Eye damage/eye irritation – Category 1
Skin sensitization – Category 1

Skin sensitization – Category 7
Skin irritation – Category 1

Specific target organ toxicity – repeated exposure – Category 2, Respiratory System Specific target organ toxicity – single exposure – Category 3, Respiratory System

Label Elements, including precautionary statements

Pictograms: (!)

Signal Word: DANGER

Hazard Statements:

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage
H335	May cause respiratory irritation.

Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

Precautionary Statement(s)

Prevention:

H351

P201	Obtain special instruction before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands and skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.

P280 Response:

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

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

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P310 Immediately call a POISON CENTER/doctor.

P303+P313+P310 IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with plenty

of water or shower. Immediately call a POISON CENTOR/doctor.

P363 Wash contaminated clothing before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice or attention.

P304+P340+P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a

POISON CENTER/doctor if you feel unwell.

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

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

Storage:

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up

Disposal:

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component

 Iron
 CAS# 1309-37-1
 50%

 Cement
 CAS#: 65997-15-1
 30-35%

 Crystalline Silica in the form of Quartz
 CAS#: 14808-60-7
 15-20%

Ingredients not listed on this safety data sheet are considered to be non-hazardous according to OSHA 1910.1200 or are not present above their cutoff levels. Where a range is displayed, the exact percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First Aid Measures

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Inhalation: If breathed in, move person into fresh air and keep comfortable for breathing. Consult a physician.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a physician.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Skin Contact: Remove contaminated clothing. Wash off with soap and plenty of water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Material is Non-combustible. Use Water spray, alcohol-resistant foam, dry chemical, or carbon dioxide for surrounding fire.

Specific Hazards Arising from the Chemical

Avoid breathing dust. Wet cement is caustic.

Hazardous Combustion Products

Calcium Oxide. Sulfur Dioxide

Protective Equipment and Precautions for Firefighters

Wear self-contained breathing apparatus and full protective gear for firefighting.

Further Information: See Section 7 for safe handling and storage.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Avoid actions that cause the material to become airborne. Avoid inhalation of dust and contact with skin. Wear appropriate personal protective equipment during any cleanup and response activities.

Environmental Precautions

Do not wash cement down sewage and drainage systems or into bodies of water.

Methods and Material for Containment and Cleaning Up

Place spilled material into a container. Scrape wet material and place in container. Allow material to dry or solidify before disposal. Dispose of cement according to Federal, State, Provincial and Local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Conditions for Safe Storage, Including any Incompatibilities

General information: Keep bagged material dry until used. Stack bagged material in a secure manner to prevent falling. Bagged material is heavy and poses risks such as sprains and strains to the back, arms, shoulders and legs during lifting and mixing. Handle with care and use appropriate control measures.

Incompatibilities: Water will cause product to solidify.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Component Exposure Limits

Cement CAS#: 65997-15-1 OSHA 15 mg/m3 T (Total) / 5 mg/m3 R (Respirable) Silica, Quartz CAS#: 14808-60-7 OSHA TWA 10 mg/m3, ACGIH TWA 0.025 mg/m3 Calcium Magnesium Hydroxide Hydrated CAS#: 39445-23-3 OSHA TLV 5 mg/m3

Appropriate Engineering Controls

Local Ventilation: Recommended General Ventilation: Recommended

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection: Use proper protection – Safety Glasses as a minimum

Skin and Body Protection: Wash at mealtime and end of shift. Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc.). Use chemical protective gloves as a minimum and wash skin promptly upon any skin contact.

Respiratory Protection: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Wash hands before & after breaks and work day.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State

Appearance: Solid Powder Odor: Mild

Color: Gray Odor threshold: No Data

<u>Property</u> <u>Value</u> <u>Remarks – Method</u>

Not Available Vapor Pressure Vapor Density Not Available Relative Density Not Available pH (In Water) 12-13 Melting/Freezing Point Not Relevant Solubility Not Available **Evaporation Rate** Not Available Flash Point Not Relevant Flammability Limits Not Available Flammability (Solid, gas) Not Relevant Auto Ignition Temperature Not Available Initial Boiling Point/Boiling Range Not Available **Decomposition Temperature** Not Available Viscosity Not Available Specific Gravity Not Available

10. STABILITY AND REACTIVITY

Chemical Stability:

Stable.

Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

Conditions to Avoid:

Keep dry until use. Avoid contact with incompatible materials.

Incompatible Materials:

Wet cement is alkaline and is incompatible with acids, ammonium salts and aluminum metal. Cement dissolves in hydrofluoric acid, producing corrosive silicon tetraflouride gas. Cement reacts with water to form silicates and calcium hydroxide. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride.

Hazardous Decomposition Products

None known

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Inhalation, Skin Contact, Eye Contact, Ingestion

Symptoms of Exposure:

Inhalation: May cause respiratory irritation

Skin: Causes severe skin burns and may cause allergic skin reaction.

Eyes: Causes serious eye damage

Ingestion: Irritation of the digestive system may occur if large amounts are swallowed.

Numerical measures of toxicity:

Acute Toxicity Value: Silica-LD50 oral rat 22,500 mg/kg

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure Dermatitis:

Irritant Dermatitis is caused by physical properties of cement including alkalinity and abrasion. **Allergic Dermatitis** is caused by sensitization to hexavalent chromium (Chromate) present in cement. The reaction can range from a mild rash to severe skin ulcers. Persons already sensitized may react to the first contact with cement. Others may develop allergic dermatitis after years of repeated contact with cement.

Carcinogenicity:

IARC: 1-Group 1: Carcinogenic to humans (Quartz)

ACGIH: No component of this product is present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: Carcinogenic to humans (Quartz)

OSHA: No component of this product is present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Specific target organ toxicity: Single exposure – No data available.

Specific target organ toxicity: Repeated exposure - Category 2, Respiratory System.

Silicosis: Silicosis is caused by the inhalation and retention of respirable crystalline silica dust. **Simple Chronic Silicosis -** results from long-term exposure (more than 20 years) to low amounts of respirable crystalline silica. Nodules of chronic inflammation and scarring provoked by the respirable

crystalline silica form in the lungs and chest lymph nodes. This disease may feature breathlessness and may resemble chronic obstructive pulmonary disease (COPD).

Accelerated silicosis – occurs after exposure to larger amounts of respirable crystalline silica over a shorter period of time (5-15 years). Inflammation, scarring, and symptoms progress faster in accelerated silicosis than in simple silicosis.

Acute silicosis – results from short-term exposure to very large amounts of respirable crystalline silica. The lungs become very inflamed and may fill with fluid, causing severe shortness of breath and low blood oxygen levels.

Pre-Existing Conditions: Cement dust is irritating to the nose, throat and respiratory tract causing coughing and sneezing. Pre-existing upper respiratory and lung diseases including asthma and bronchitis may be aggravated.

12. ECOLOGICAL INFORMATION

Eco toxicity: Not expected to be hazardous to the environment.

Persistence and Degradability: No Data Available

Bioaccumulation: No Data Available

Mobility: No Data Available

Other Adverse Effects: No Data Available

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes: This product is not expected to be a hazardous waste under RCRA. Place spilled material into a container. Scrape wet material and place in container. Allow material to dry or solidify before disposal. Dispose of according to Federal, State, Provincial and Local regulations.

Contaminated Packaging: Dispose of as unused material.

14. TRANSPORT INFORMATION

D.O.T.: Not a Dangerous Good

I.A.T.A.: Not a Dangerous Good

I.M.D.G.: Not a Dangerous Good

Marine Pollutant: No

15. REGULATORY INFORMATION

International Inventories

TSCA: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

US Federal Regulations

SARA 302: None Known

SARA 311/312 Hazard Categories: Acute Health Hazard, Chronic Health Hazard

SARA 313 Hazard Categories: None Known

CWA (Clean Water Act): None Known

Supplemental State Compliance Information

California:

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

Quartz CAS#:14808-60-7

Hexavalent Chromium Compounds

New Jersey Right TO Know

CAS Number Component Name

14808-60-7 Quartz

Pennsylvania Right To Know

CAS Number Component Name

14808-60-7 Quartz

Massachusetts Right To Know

CAS Number Component Name

14808-60-7 Quartz

U.S. EPA Label Information: No Data

16. OTHER INFORMATION

HMIS Classification:

Health hazard: 2
Flammability: 0
Physical Hazards: 0

NFPA Rating:

Health hazard: 2
Fire: 0
Reactivity Hazard: 0

Issuance Date: April 7, 2017 Revision Date: June 25, 2018

Revision Note: Reviewed and Updated Date of Previous Version: August 21, 2014

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet