1 IDENTIFICATION

Product identifier: Rapid Set Mortar Mix Plus (MMP)

Other means of identification:
- Product code: 143010055
- Recommended use: Industrial use
- Recommended restrictions: Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

Manufacturer/Importer/Supplier/Distributor information
- Company name: CTS Cement Manufacturing Corporation
- Address: 12442 Knott Street, Garden Grove, CA 92841, United States
- Telephone: 1-800-929-3030
- E-mail: info@ctscement.com
- Contact person: Safety Officer
- Emergency telephone number: 1-800-929-3030 (8 AM - 5 PM)

2 HAZARDS IDENTIFICATION

Physical hazards: Risk of dust explosion

Health Hazards:
- Skin corrosion/irritation: Category 2
- Serious eye damage/eye irritation: Category 1
- Carcinogenicity: Category 1A
- Specific Target Organ Toxicity, Single Exposure: Category 3: respiratory tract irritation
- Specific Target Organ Toxicity, Repeated Exposure: Category 2: lungs

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

Label elements:
- Pictogram(s):
- Signal Word: Danger
Hazard statement
Contains material which can cause cancer. Can form explosive dust air mixtures. Avoid creating dust. Causes skin irritation. Causes serious eye damage. May cause respiratory irritation. Avoid inhalation of dust. Avoid ingestion. Avoid contact with skin, eyes, and clothing. H318 H315

Precautionary statement
Prevention
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wash thoroughly with plenty of soap and water after handling. Use in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. P280 P264

Response
If exposed or concerned: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If on skin (or hair): Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. P305 P351 P338 P310 P303 P352 P362 P364

Storage
Keep container tightly closed. Store in dry location.

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

Hazard(s) not otherwise classified (HNOC)
None known.

3 COMPOSITIONS/INFORMATION ON INGREDIENTS

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>Concentration %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium Sulfoaluminate Cement</td>
<td>960375-09-1</td>
<td>20 - 40</td>
</tr>
<tr>
<td>Silica Sand, Quartz</td>
<td>14808-60-7</td>
<td>60 - 80</td>
</tr>
<tr>
<td>Iron Oxide</td>
<td>1309-37-1</td>
<td>0.1 – 2</td>
</tr>
<tr>
<td>Proprietary mineral filler</td>
<td>-</td>
<td>0.01 – 1</td>
</tr>
<tr>
<td>Vinyl Acetate – Ethylene Copolymer</td>
<td>108-05-4</td>
<td>0.01 - 1</td>
</tr>
</tbody>
</table>

Composition comments
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4 FIRST-AID MEASURES

Inhalation
If dust from the material is inhaled, remove the affected person immediately to fresh air. Rinse nose and mouth with water. Call a physician if symptoms develop or persist.

Skin contact
Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact

Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion

Immediately rinse mouth and drink plenty of water. Do not induce vomiting unless told to by a poison control center or doctor. Call an ambulance and take these instructions. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

May cause eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Upper respiratory tract irritation. Coughing. Discomfort in the chest. Shortness of breath. Wheezing. Skin irritation.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. No known specific antidote.

General information

If unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Remove contaminated clothing.

5  FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water spray. Foam. Dry chemical powder. Carbon dioxide (CO2). Note: Product itself is non-combustible. Only the packaging materials can catch fire. The extinguishing agents normally used are sufficient.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Carbon monoxide, carbon dioxide, harmful vapors. Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire. Product is not combustible or explosive.

Special protective equipment

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment/instructions

Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials. The degree of risk is governed by the burning substance and the fire conditions. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

General fire hazards

No unusual fire or explosion hazards noted.
6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid inhalation of dust. Avoid skin contact. 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. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. 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. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Collect dust using a vacuum cleaner. Minimize dust generation and accumulation. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

For small amounts: Pick up with suitable appliance and dispose of.

For large amounts: Pick up with suitable appliance and dispose of. Pack in tightly closed containers for disposal.

Avoid raising dust.

Environmental precautions

Avoid discharge into drains or water courses.

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. Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. This may cause severe irritation of skin or mucous membranes. The humidity of the skin or mucous membranes is enough for this reaction. Do not breathe dust. Do not get this material in contact with eyes. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store in dry location. Store away from incompatible materials (see Section 10 of the SDS). Keep away from metals, acids, bases, oxidants, and food and animal feeds. Keep away from ignition sources, heat or flame. Protect from direct sunlight.

Dust explosion class

St1
**EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Occupational exposure limits**

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary mineral filler</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Respirable fraction</td>
</tr>
<tr>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Total dust</td>
<td></td>
</tr>
<tr>
<td>Dusts, non-specific</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Respirable</td>
</tr>
<tr>
<td>Silica, Quartz (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.3 mg/m³</td>
<td>Total dust</td>
</tr>
<tr>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td>Respirable</td>
<td></td>
</tr>
</tbody>
</table>

**US. OSHA Table Z-3 (29 CFR 1910.1000)**

- Occurs in nature as limestone, chalk, marble, dolomite, aragonite, calcite, & oyster shells

**US. ACGIH Threshold Limit Values**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary mineral filler</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Respirable fraction</td>
</tr>
<tr>
<td>Dusts, non-specific</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Respirable fraction</td>
</tr>
<tr>
<td>Silica, Quartz (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.025 mg/m³</td>
<td>Respirable fraction</td>
</tr>
</tbody>
</table>

**US. NIOSH: Pocket Guide to Chemical Hazards**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, Quartz (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.05 mg/m³</td>
<td>Respirable dust</td>
</tr>
</tbody>
</table>

**Biological limit values**

- No biological exposure limits noted for the ingredient(s).

**Exposure guidelines**

- Occupational exposure to nuisance dust (total and respirable) should be monitored and controlled.

**Appropriate engineering controls**

- 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. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. Eye wash facilities and emergency shower must be available when handling this product.

**Individual protection measures, such as personal protective equipment**

- **Eye/face protection**
  - Wear safety glasses or safety goggles unless full face respirator is in use.

- **Skin protection**
  - **Hand protection**
  - Wear appropriate chemical resistant gloves.
Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

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.

General hygiene considerations

When using, do not eat, drink or smoke. 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. Observe any medical surveillance requirements.

9 PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Appearance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Form</td>
<td>Powder</td>
</tr>
<tr>
<td>Color</td>
<td>Tan</td>
</tr>
<tr>
<td>Odor</td>
<td>Low</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>11-12 when wet</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not combustible</td>
</tr>
</tbody>
</table>

Upper/lower flammability or explosive limits

| Flammability limit – lower (%) | Not applicable |
| Flammability limit – upper (%) | Not applicable |

Vapor pressure | Not applicable |

Vapor density | Not applicable |

Relative density | 2.7-301 @ 20°C |

Solubility(ies)

| Solubility (water) | Not available |

Partition coefficient (n-octanol/water) | No applicable information available |

Auto-ignition temperature | Not applicable |

Decomposition temperature | 2460°F (1350°C) |

Viscosity | Not applicable |

Other information
Bulk density 60 lb/ft³
Partition coefficient (oil/water) Not applicable
VOC (weight %) 0 g/L when mixed with water

10 STABILITY AND REACTIVITY

Reactivity The product is stable and non-reactive under normal conditions of use, storage, and transport.
Corrosion to metals No corrosive effect on metal
Minimum ignition energy Material is stable under normal conditions
Chemical stability Material is stable under normal conditions.
Possibility of hazardous reactions No dangerous reaction known under conditions of normal use. Strong bases are formed on the addition of water
Conditions to avoid Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Avoid humidity.
Incompatible materials Powerful oxidizers, acids, bases.
Hazardous decomposition products
Decomposition products No hazardous decomposition products if stored and handled as prescribed/indicated
Thermal decomposition No decomposition if stored and handled as prescribed/indicated

11 TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Inhalation May cause damage to organs through prolonged or repeated exposure by inhalation. Inhalation of dusts may cause respiratory irritation. Prolonged inhalation may be harmful.
Skin contact May cause skin irritation.
Eye contact May cause eye irritation.
Ingestion Swallowing may cause gastrointestinal irritation.
Symptoms related to the physical, chemical, and toxicological characteristics May cause eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Upper respiratory tract irritation. Coughing. Discomfort in the chest. Shortness of breath. Wheezing. Skin irritation.

Information on toxicological effects
Acute toxicity May cause respiratory irritation.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>May cause skin irritation.</td>
<td></td>
</tr>
</tbody>
</table>
Serious eye damage/eye irritation

May cause eye damage.

Respiratory or skin sensitization

Respiratory sensitization

No data available

Skin sensitization

No data available

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica 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 fibers, 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. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

IARC Monographs. Overall Evaluation of Carcinogenicity

Silica, Quartz (14808-60-7) 1 Carcinogenic to humans

NTP Report on Carcinogens

Silica, Quartz (14808-60-7) Known to be human carcinogen

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

Reproductive toxicity

May damage fertility or the unborn child.

Specific target organ toxicity – single exposure

May cause respiratory irritation.

Specific target organ toxicity – repeated exposure

May cause damage to organs (Lungs) through prolonged or repeated exposure.

Aspiration hazard

Due to the physical form of the product it is not an aspiration hazard.

Chronic effects

Prolonged or repeated exposure may cause lung injury. May cause skin disorders if contact is repeated or prolonged.

12 ECOLOGICAL INFORMATION

Ecotoxicity

Based on available Data, the classification criteria are not met. There is a high probability that the product is not acutely harmful to aquatic organisms.
Persistence and degradability
Inherently biodegradable. The soluble fraction can be removed by mechanical means in suitable waste water treatment plants. The polymer component of the product is poorly biodegradable.

Bioaccumulative potential
Discharge into the environment must be avoided.

Mobility in soil
No data available.

Other adverse effects
Do not discharge product into the environment without control. The product has not been tested. The statements on ecotoxicity have been derived from the properties of the individual components.

13 DISPOSAL CONSIDERATIONS

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Do not discharge into drains/surface waters/groundwater.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues/unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14 TRANSPORT INFORMATION

USDOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable

15 REGULATORY INFORMATION

US federal regulations
This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed
CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories
- Immediate Hazard - Yes
- Delayed Hazard - Yes
- Fire Hazard – No
- Pressure Hazard – No
- Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not Listed

SARA 311/312 Hazardous chemical
Acute

SARA 313 (TRI reporting)
Not regulated

Other federal regulations
- Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
  Not regulated
- Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
  Not regulated
- Safe Drinking Water Act (SDWA)
  Not regulated
- US. California Proposition 65
  US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance
  \[\text{WARNING}\]
  CANCER and REPRODUCTIVE HARM - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates this product complies 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 OF LAST REVISION

<table>
<thead>
<tr>
<th>Issue date</th>
<th>27 June 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision date</td>
<td>15 October 2019</td>
</tr>
<tr>
<td>Version #</td>
<td>01</td>
</tr>
<tr>
<td>HMIS® ratings</td>
<td>Health: 3*</td>
</tr>
<tr>
<td></td>
<td>Flammability: 0</td>
</tr>
<tr>
<td></td>
<td>Physical hazard: 0</td>
</tr>
</tbody>
</table>
Disclaimer

CTS Cement Manufacturing Corporation cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.