SAFETY DATA SHEET

1. Identification
Product identifier
Rapid Set Corrosion Inhibitor
Other means of identification
Product code
815100000
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 and respirable crystalline silica as well as their potential hazards. 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. Hazard(s) identification
Physical hazards
Not classified.
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

Label elements
Signal word
Danger
Hazard statement
Not a hazardous substance or mixture
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 after handling. Use in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
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: Wash with plenty of 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.
Storage
Keep container tightly closed. Store in dry location.
3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polymer blend based on polyvinyl alcohol and multifunctional silane compounds</td>
<td>proprietary</td>
<td>90-100</td>
</tr>
</tbody>
</table>

Composition comments

This material is classified as not hazardous under OSHA regulations

4. First-aid measures

Inhalation

In case product dust is released; possible discomfort; cough, sneezing. Move victims into fresh air. 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. Get medical attention if irritation develops.

Ingestion

Immediately rinse mouth and drink plenty of water. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

None known.

Indication of immediate medical attention and special treatment needed

If required, therapy of irritative effect. If substance has been swallowed; early endoscopy in order to assess mucosa lesions in the oesophagus and stomach which may appear. If necessary, aspirate leftover substance. Provide general supportive measures and treat symptomatically. Keep victim under observation.

General information

If you feel 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.

5. Fire-fighting measures

Suitable extinguishing media


Unsuitable extinguishing media

None known.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed: carbon monoxide, carbon dioxide.

Special protective equipment and precautions for firefighters

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.

General fire hazards

No unusual fire or explosion hazards noted.
6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. 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
Sweep up or vacuum up spillage and collect in suitable container for disposal. 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. For waste disposal, see section 13 of the SDS.

Environmental precautions
Obey relevant local, state, provincial and federal laws and regulations. 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. 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.

Conditions for safe storage, including any incompatibilities
Store in container tightly closed in dry and well ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Dust explosion class: St1 standardized max. rate of pressure increase, KSt: < 100 bar·m/s

8. Exposure controls/personal protection

Occupational exposure limits

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dusts, non-specific</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

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>Dusts, non-specific</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Respirable fraction.</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 should be used. 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 with side shields 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 respirator that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal requirements must be followed whenever workplace conditions warrant respirator use. NIOSH’s “Respirator Decision Logic” may be useful in determining the suitability of various types of respirators.

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>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Solid.</td>
</tr>
<tr>
<td>Physical state</td>
<td>Powder.</td>
</tr>
<tr>
<td>Form</td>
<td>Powder.</td>
</tr>
<tr>
<td>Color</td>
<td>White.</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless.</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH</td>
<td>6-9 (100 g/l) as a dispersion</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>Non combustible.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td></td>
</tr>
<tr>
<td>Flammability limit - lower (%)</td>
<td>Dust 15.0 g/m³</td>
</tr>
<tr>
<td>Flammability limit - upper (%)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Relative density</td>
<td>2.7-3.1 @ 20°C</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td></td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>Partly soluble.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Bulk density</td>
<td>250-450 kg/m³</td>
</tr>
<tr>
<td>Partition coefficient (oil/water)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>VOC (Weight %)</td>
<td>0 g/l when mixed with water</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability
Material is stable under normal conditions.

Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

Conditions to avoid
Avoid the formation of flammable or explosive dust/air mixtures possible. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

Incompatible materials
None known.

11. Toxicological information

Information on likely routes of exposure
Symptoms related to the physical, chemical and toxicological characteristics

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  Causes skin irritation. Prolonged contact with wet cement/mixture may cause burns.

Eye contact  Causes serious eye damage. Prolonged contact with wet cement/mixture may cause burns.

Ingestion  Swallowing may cause gastrointestinal irritation.

Information on toxicological effects

Acute toxicity  May cause respiratory irritation.

Skin corrosion/irritation  Causes skin irritation.

Serious eye damage/eye irritation  Causes eye irritation.

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  Contains no carcinogenic substances as defined by NTP, IARC and/or OSHA.
IARC Monographs. Overall Evaluation of Carcinogenicity
Not listed.

NTP Report on Carcinogens
Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

- Reproductive toxicity: No data available.
- 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: No further information available.

12. Ecological information

- Ecotoxicity: The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
- Persistence and degradability: No data is available on the degradability of this product.
- Bioaccumulative potential: No data available.
- Mobility in soil: No data available.
- Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

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.
- 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

- DOT: 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 not a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Not listed.

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

SARA 302 Extremely hazardous substance
No
SARA 311/312 Hazardous chemical
No
SARA 313 (TRI reporting)
No

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 state regulations
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
US. Massachusetts RTK - Substance List
US. New Jersey Worker and Community Right-to-Know Act
US. Pennsylvania Worker and Community Right-to-Know Law
US. Rhode Island RTK
Not regulated
US. California Proposition 65
US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

⚠️ WARNING
CANCER and REPRODUCTIVE HARM - 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>None listed</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 or last revision

Issue date
01-June-2015

Revision date
-

Version #
01

HMIS® ratings
Health: 1
Flammability: 0
Physical hazard: 0

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.

Rapid Set Corrosion Inhibitor
Version #: 02   Revision date: -   Issue date: 04-June-2018

SDS US
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