



SAFETY DATA SHEET

1. Identification

Product identifier Rapid Set SET Control

Other means of identification

Product code 801010010, 801040035, 801040050, 801100000

Recommended use Industrial use.

Recommended restrictions None known.

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 Acute toxicity, dermal Category 5
Skin irritation Category 3

OSHA defined hazards Eye irritation Category 2A

Label elements Not classified.



Signal word Warning

Hazard statement Causes mild skin irritation. May be harmful in contact with skin. Causes serious eye irritation.

Precautionary statement

Prevention Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Storage Store in dry location. Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

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

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Weak food grade acid	77-92-9	90-100

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	Move to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician if symptoms develop or persist.
Skin contact	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	Do Not induce vomiting. Do not give anything by mouth to an unconscious person. Immediately rinse mouth and drink plenty of water. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. 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.
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	Use water spray, alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	
Specific hazards arising from the chemical	Emits toxic fumes carbon oxides during fire.
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	For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Arrange disposal without generating dust. Sweep up and shovel. Clean surfaces with water to remove contaminants. 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.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
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).

8. Exposure controls/personal protection

Occupational exposure limits

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

Components	Type	Value	Form
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US. ACGIH Threshold Limit Values

Components	Type	Value	Form
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US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
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Biological limit values

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

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 chemical safety glasses or safety goggles with side shields unless full face respirator is in use.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves, nitrile or rubber 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.

9. Physical and chemical properties

Appearance

Physical state

Solid.

Form

Powder.

Color

Tan.

Odor

Odorless.

Odor threshold

Not available.

pH

1.8 at ca. 50 g/l at 25°C (77°F)

Melting point/freezing point

153°C (307°F)

Initial boiling point and boiling range

173°C

Flash point

100°C (212°F)

Evaporation rate

Not applicable.

Flammability (solid, gas)

Flammable solid when

heated above flash point.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) LEL: 0.28%.

Flammability limit - upper (%) UEL: 2.29%.

Vapor pressure Not applicable.

Vapor density Not applicable.

Relative density 1.67 @ 20°C

Solubility(ies)

Solubility (water) Soluble in water; 383 g/l at 25°C (77°F).

Partition coefficient (n-octanol/water) -1.64 at 20°C (68°F).

Auto-ignition temperature Not applicable.

Decomposition temperature 1010 °F (1850 °C)

Viscosity Not applicable.

Other information

Bulk density Not applicable.

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.

Chemical stability Material is stable under normal conditions.

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

Conditions to avoid Excess heat. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

Incompatible materials Strong oxidizing agents, bases, reducing agents, nitrates.

Hazardous decomposition products Carbon oxides.

11. Toxicological information**Information on likely routes of exposure**

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.

Symptoms related to the physical, chemical and toxicological characteristics Severe 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. Skin irritation.

Information on toxicological effects

Acute toxicity May cause respiratory irritation.

Components	Species	Test Results
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Citric Acid (CAS 77-92-9)

Skin	LD 50 Dermal – Rat -> 2000 mg/kg
Eyes	Eyes- rabbit – irritating to eyes OECD Test 405
Respiratory	Not Available
Ingestion	LD50 Oral – rat - 5400 mg/kg

Skin corrosion/irritation Causes skin irritation, itching, swelling, redness, and pain.

Serious eye damage/eye irritation Causes serious eye irritation, itching, redness, pain.

Respiratory or skin sensitization

Respiratory sensitization Irritation.

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

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

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

Reproductive toxicity No data available.

Specific target organ toxicity - single exposure No data available.

Specific target organ toxicity - repeated exposure No data available.

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

12. Ecological information

Ecotoxicity

Aquatic Vertebrate	Mortality LC50 – Leuciscus idus melanotus – 440 mg/l – 48 hours
Aquatic Invertebrate	Static test – Daphnia magna (water flea) – 1535 mg/l – 24 hours
Terrestrial	Not Available

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

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

Not regulated.

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 - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes
Citric Acid

SARA 313 (TRI reporting)

Not listed.

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

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania Worker and Community Right-to-Know Law

Not regulated.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*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 08-November-2018

Revision date -

Version # 02

HMIS® ratings Health: 2
Flammability: 1
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.