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SECTION 1: Identification

Product identifier
Product name: Set Control
Product code: 801010010, 801040035, 801040050, 80110000

Recommended use of the product and restriction on use
Relevant identified uses: Use as retarder additive for cement based products.
Uses advised against: Not determined or not applicable.
Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details
Manufacturer:
United States
CTS Cement Manufacturing Corporation
12442 Knott St.
Garden Grove, CA 92841
800-929-3030
info@ctscement.com

Emergency telephone number:
United States
INFOTRAC 1-800-535-5053
International
INFOTRAC 1-352-323-3500

SECTION 2: Hazard(s) identification

GHS classification:
Serious eye damage/eye irritation, category 2A

Label elements

Hazard

Pictograms:

Signal word: Warning

Hazard statements:
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary statements:
P261 Avoid breathing dust.

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P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
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.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P314 Get medical advice/attention if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P302+P361+P353: If on skin: Remove immediately all contaminated clothing. Rinse skin with water.
P362 Take off contaminated clothing and wash before reuse.
P301+P330+P331: If swallowed: Rinse mouth. DO NOT induce vomiting.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P405 Store locked up.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazards not otherwise classified: None.

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 77-92-9	Citric acid	80-100

Additional Information:

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200).

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Move to fresh air. Oxygen or artificial respiration if needed. Call a physician if symptoms develop or persist.

After skin contact:

Wash off with soap and water. Get medical attention if irritation develops and persists.

After 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 if irritation develops and persists. If eye irritation persists: Get medical advice/attention.

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Rinse mouth. Get medical attention if symptoms occur.

After swallowing:

Rinse mouth thoroughly. Seek medical attention if irritation, discomfort, or vomiting persists.

Most important symptoms and effects, both acute and delayed

Acute and delayed symptoms and effects:

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Dusts may irritate the respiratory tract, skin and eyes.

Immediate medical attention and special

treatment Specific treatment:

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

Notes for the doctor:

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Apply extinguishing media carefully to avoid creating airborne dust. Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

Unsuitable extinguishing media:

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

Specific hazards during fire-fighting:

Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard. During fire, gases hazardous to health may be formed. Combustion products may include: carbon oxides. During fire, gases hazardous to health may be formed such as: Carbon oxides.

Special protective equipment for firefighters:

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

Special precautions:

Use standard firefighting procedures and consider the hazards of other involved materials. May form combustible dust concentrations in air.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Use only non-sparking tools. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. 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.

Environmental precautions:

Should not be released into the environment. Prevent from reaching drains, sewer or waterway.

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Methods and material for containment and cleaning up:

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect dust using a vacuum cleaner equipped with HEPA filter. This product is miscible in water. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Minimize dust generation and accumulation. Absorb in vermiculite, dry sand or earth and place into containers. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Reference to other sections:

For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

Precautions for safe handling:

Minimize dust generation and accumulation. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Explosion-proof general and local exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid breathing dust. Avoid contact with skin and eyes. Avoid prolonged exposure. Wash thoroughly after handling. Wear appropriate personal protective equipment. Handle and open container with care. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities:

Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep away from heat, sparks and open flame.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Form	Permissible concentration
United States (OSHA)	Citric Acid	Respirable	TWA 5 mg/m³
		Total dust	TWA 15 mg/m³
		Total dust	TWA 50 mppcf
		Respirable	TWA 15 mppcf
ACGIH	Citric Acid	Respirable	TWA 3 mg/m³
		Inhalable	TWA 10 mg/m³

		particles	

Biological limit values:

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

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

Explosion-proof general and local exhaust ventilation. Good general ventilation 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. Provide eyewash station. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. Eye wash facilities and emergency shower must be available when handling this product.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance. Wear appropriate clothing to prevent any possibility of skin contact. Nitrile, butyl rubber or neoprene gloves are recommended.

Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

General hygienic measures:

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.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Solid; white granulates
Odor	Not available
Odor threshold	Not available
pH	2.2
Melting point/freezing point	307.4°F (153°C)
Initial boiling point/range	Not applicable
Flash point (closed cup)	Not available

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Evaporation rate	Not applicable
Flammability (solid, gas)	Combustile dust
Upper flammability/explosive limit	Not available
Lower flammability/explosive limit	Not available
Vapor pressure	Not applicable
Vapor density	Not applicable
Density	Not available
Relative density	2.96 – 2.98 at 20°C
Solubilities	Soluble
Partition coefficient (n-octanol/water)	Not available
Auto/Self-ignition temperature	1851.8°F (1011°C)
Decomposition temperature	Not available
Dynamic viscosity	Not applicable
Kinematic viscosity	Not applicable
Explosive properties	Not available
Oxidizing properties	Not available

Other information

VOC (Weight %)	0 g/l when mixed with water

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials. Minimize dust generation and accumulation. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

Incompatible materials:

Strong oxidizing agents.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Information on toxicological effects:

Acute toxicity

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

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Product data: No data is available.
Substance data:

Name	Route	Result
Citric Acid (77-92-9)	Dermal	LD50 Rat: >2000 mg/kg, 24 hours
	Oral	LD50 Mouse: 5400 mg/kg

Skin corrosion/irritation

Assessment: Causes skin irritation.
Product data: No data is available.
Substance data:

Name	Result
Citric Acid	Dust may irritate skin.

Serious eye damage/irritation

Assessment: Causes serious eye damage.
Product data: No data is available.
Substance data:

Name	Result
Citric Acid	Causes serious eye damage.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.
Product data: No data is available.
Substance data: No data is available.

Carcinogenicity

Assessment: May cause cancer.
Product data: No data is available.
Substance data: No data is available.

International Agency for Research on Cancer (IARC): Not listed.

National Toxicology Program (NTP): Not listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.
Product data: No data is available.
Substance data: No data is available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.
Product data: No data is available.
Substance data: No data is available.

Specific target organ toxicity (single exposure)

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Assessment: May cause respiratory irritation

Product data: No data is available.

Substance data: No data is available.

Aspiration toxicity

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

Product data: No data is available.

Substance data: No data is available.

Information on likely routes of exposure:
No data is available.

Symptoms related to the physical, chemical and toxicological characteristics:
No data is available.

Other information:
Prolonged inhalation may be harmful.

SECTION 12: Ecological information

Acute (short-term) toxicity

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

Product data: No data available.

Substance data: No data available.

Chronic (long-term) toxicity

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

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory

SECTION 14: Transport information

entities.

United States Transportation of dangerous goods (49 CFR DOT)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

SECTION 15: Regulatory information

United States regulations Inventory listing (TSCA): All components are on the U.S. EPA TSCA Inventory List.

Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.

Export notification under TSCA Section 12(b): None of the ingredients are listed.

SARA Section 302 extremely hazardous substances: None of the ingredients are listed.

SARA Section 311/312 hazardous: Yes

Classified hazard	Combustible dust
Categories	Serious eye damage or eye irritation

SARA Section 313 substances: None of the ingredients are listed

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CERCLA: None of the ingredients are listed.

RCRA: None of the ingredients are listed.

Section 112(r) of the Clean Air Act (CAA): None of the ingredients are listed.

Massachusetts Right to Know: Not listed.
New Jersey Right to Know: Not listed.
New York Right to Know: Not listed.
Pennsylvania Right to Know: Not listed.

California Proposition 65: Not listed/Not Regulated.

SECTION 16: Other information

Abbreviations and Acronyms:

ACGIH: American Conference of Governmental Industrial Hygienists
ADR: European Road Transport
AU: Australia
CA: Canada
CAS: Chemical Abstracts Service
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
CN: China
CPR: Controlled Products Regulations
DFG: Deutsche Forschungsgemeinschaft
DOT: Department of Transportation
DSL: Domestic Substances List
EEC: European Economic Community
ECHA: European Chemicals Agency
EINECS: European Inventory of Existing Commercial Chemical Substances
EPA: Environmental Protection Agency
EU: European Association
IARC: International Agency for Reach on Cancer
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
JP: Japan
COD: Chemical Oxygen Demand
BOD5: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
CL50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol-water partition coefficient
Koc: Partition coefficient of organic carbon
Know: Octanol/water partition coefficient
KR: Korea
LEL: Lower Explosive Limit
UEL: Upper Explosive Limit
NIOSH: National Institute for Occupational Safety and Health Administration

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PH: Philippines
RCRA: Resource Conservation and Recovery Act
OSHA: Occupational Safety and Health Administration
RID: European Rail Transport
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TDG: Transportation of Dangerous Goods
TSCA: Toxic Substances Control Act
TWA: Time Weighted Average
US: United States

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal 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, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

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End of Safety Data Sheet