Rapid Set

SAFETY DATA SHEET

1. Identification

Telephone E-mail

Product identifier Rapid Set FLOW Control

Other means of identification

Product code 802010010, 802040035, 802100000

Recommended use Industrial use.

Recommended restrictionsWorkers (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 1-800-929-3030 info@ctscement.com

Contact person Safety Officer

Emergency telephone Salety Office 1-800-929-30

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 Category 3 respiratory tract irritation

Exposure

Specific Target Organ Toxicity, Repeated

Exposure

Category 2 (Lungs)

OSHA defined hazards

Chronic target organ effects reported.

Label elements



Signal word Danger

Hazard statement Contains material which can cause cancer. Can form explosive dust air mixtures. Avoid creating

dust. May cause sensitization by skin contact. May cause respiratory irritation. Avoid inhalation

of dust. Avoid ingestion. Avoid contact with skin, eyes and clothing.

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.

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

None known.

3. Composition/information on ingredients

Mixtures

| Chemical name | CAS number | % |
|----------------------|------------|---------|
| Proprietary Compound | | 99-99.9 |
| Methanal | 50-00-0 | < 0.1 |
| | | |
| | | |
| | | |
| | | |

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. 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.

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 Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

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
General fire hazards

Use standard firefighting procedures and consider the hazards of other involved materials.

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. Dust can form an explosive mixture with air.

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. 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 ignition sources, heat or flame. Protect from direct sunlight.

8. Exposure controls/personal protection

Occupational exposure limits

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

| Components | Туре | Value | Form |
|------------------------------|------------------|------------|----------------------|
| US. OSHA Table Z-3 (29 CFR 1 | 1910.1000) | | |
| Components | Туре | Value | Form |
| Methanal (CAS 50-00-00) | TWA | 0.75 mg/m3 | Total dust. |
| | | 0.5 mg/m3 | Respirable. |
| | | 2.0 mppcf | Respirable. |
| US. ACGIH Threshold Limit Va | alues | | |
| Components | Туре | Value | Form |
| | | | |
| Methanal (CAS 50-00-00) | CLV | 0.3 mg/m3 | Respirable fraction. |
| US. NIOSH: Pocket Guide to C | Chemical Hazards | | |
| Components | Туре | Value | Form |

Components Type Value Form

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

Appearance

Physical stateSolid.FormPowder.ColorWhite

Odor Characteristic
Odor threshold Not available.

pH 9 – 11.4 when wet
Melting point/freezing point Not applicable.

Initial boiling point and boiling Not applicable.

range

Flash point Not applicable.

Evaporation rate Not applicable.

Flammability (solid, gas) Non combustible.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not applicable.

Flammability limit - upper

Not applicable.

(%)

Vapor pressureNot applicable.Vapor densityNot applicable.Relative density1.84 @ 20°C

Solubility(ies)

Solubility (water) soluble at 20°C

Partition coefficient -4

(n-octanol/water)

Auto-ignition temperature Not applicable.

Decomposition temperature 2460 °F (1350 °C)

Viscosity Not applicable.

Other information

Bulk density 500-800 kg/m3

Partition coefficient Not applicable.

(oil/water)

VOC (Weight %) Not Tested.

10. Stability and reactivity

ReactivityThe 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 avoidAvoid temperatures exceeding the decomposition temperature. Contact with incompatible

materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

Incompatible materials Powerful oxidizers, acids, bases.

Hazardous decomposition

products

Possible separation of methanal in small quantities. The substances/substance groups mentioned

are formed by hydrolysis

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.

Species

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.

Test Results

Wheezing. Skin irritation.

Information on toxicological effects

Acute toxicity May cause respiratory irritation.

| Skin | | |
|----------|--------|---------------------------------|
| Methanal | Rabbit | Non-irritant OECD Guideline 404 |
| | | |

Eye

Methanal Rabbit Non-irritant OECD Guideline 405

Skin corrosion/irritation May cause skin irritation.
Serious eye damage/eye May cause eye damage.

irritation

Components

Respiratory or skin sensitization

Respiratory sensitization OSHA has classified this substance as a respiratory sensitizer.

Skin sensitization Caused skin sensitization in animal studies. Caused sensitization in humans

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Contains material which can cause cancer.

Occupational exposure to respirable dust should be monitored and controlled.

IARC Monographs. Overall Evaluation of Carcinogenicity

NTP Report on Carcinogens

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicityThe results of animal studies gave no indication of a fertility impairing effect.

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 hazardDue 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

Fish

Acute: DIN 38412 Part 15 static - Leuciscux idus/LC 50 (48 h): > 560 mg/l

Aquatic invertebrates

Acute: OECD Guideline 202, part 1 static; Daphnia magna/EC50 (48 h): > 100 mg/l

Analogous: Assessment derived from products with similar chemical character. Nominal concentration. The product has low solubility

in the tests medium. An eluate has been tested. Limit concentration test only. No toxic effects

occur within the range of solubility.

Persistence and degradability Evaluation: Not readily biodegradable (by OECD criteria)

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 instructionsCollect 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).

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 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)

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

SARA 302 Extremely hazardous substance

Chemical name CAS number % by wt.

Methanal 50-00-0 <=0.02

SARA 311/312 Hazardous

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Yes

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

| Chemical name | CAS number | % by wt. |
|---------------------------------|---------------------------|----------|
| Methanal | 50-00-0 | <0.02 |
| JS. New Jersey Worker and Comm | nunity Right-to-Know Act | |
| Chemical name | CAS number | % by wt. |
| Methanal | 50-00-0 | <0.02 |
| JS. Pennsylvania Worker and Com | nmunity Right-to-Know Law | |
| Chemical name | CAS number | % by wt. |
| Methanal | 50-00-0 | <0.02 |

US. Rhode Island RTK

Chemical nameCAS number% by wt.Methanal50-00-0<0.02</td>

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

Country(s) or region Inventory name On inventory (yes/no)*

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

Yes

16. Other information, including date of preparation or last revision

Issue date 19-June-2018

Revision date Version # 03
HMIS® ratings Hea

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.

Rapid Set FLOW Control SDS US

Version #: 03 Revision date: - Issue date: 19-June-2018

^{*}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).