

4C.diff System Disinfectant

Safety Data Sheet

SECTION 1: Product and company identification

Product name : 4C.diff System Disinfectant
Use of the substance/mixture : Disinfectant
Product code : 0160
Company : Continental Research Corp.
PO Box 15204
St. Louis, MO 63110 - USA
T (800) 325-4869
Emergency number : CHEM-TEL: 888-255-3924

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Eye Irrit. 2A H319
STOT SE 3 H335
Full text of H statements : see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : Causes serious eye irritation
May cause respiratory irritation
Precautionary statements (GHS-US) : Avoid breathing dust, fume
Wash thoroughly after handling
Use only outdoors or in a well-ventilated area
Wear protective gloves, protective clothing, eye protection, face protection
If inhaled: Remove person to fresh air and keep comfortable for breathing
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Call a POISON CENTER, a doctor if you feel unwell
If eye irritation persists: Get medical advice/attention
Store in a well-ventilated place. Keep container tightly closed
Store locked up
Dispose of contents/container to comply with local/regional/national/international regulations

2.3. Other hazards

Other hazards not contributing to the classification : Direct contact with wet material or moist skin may cause severe irritation, pain, and possibly burns. Dry material is less irritating than wet material. This material is not a skin sensitizer.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable

Full text of H-phrases: see section 16

3.2. Mixture

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Name	Product identifier	%	GHS-US classification
troclosene sodium	(CAS No) 2893-78-9	30 - 65	Ox. Sol. 2, H272 Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
adipic acid	(CAS No) 124-04-9	10 - 35	Eye Irrit. 2A, H319
sodium carbonate	(CAS No) 497-19-8	2 - 12	Eye Irrit. 2A, H319

A specific chemical identity and/or percentage of composition has been withheld as a trade secret. Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Take off immediately all contaminated clothing.
- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.
- First-aid measures after skin contact : Wash with water and soap. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
- First-aid measures after ingestion : Call a physician immediately. Rinse mouth with water. Drink plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause respiratory irritation.
- Symptoms/injuries after inhalation : This material contained in this tablet in solid form is not expected to produce respiratory effects. Particles of respiratory size are generally not encountered. The respirable fraction for the tablet active ingredient is typically less than 0.1% by weight for the granular and extra granular grades. If it is ground or otherwise in a powdered form, effects similar to a corrosive substance may occur. May cause severe irritation of the respiratory tract with coughing, choking, pain and possibly burns of the mucous membranes. If significant or prolonged exposure occurs, pulmonary oedema may develop, either immediately or more often within a period of 5-72 hours. The symptoms may include tightness in the chest, dyspnea, frothy sputum, cyanosis, and dizziness. Physical findings may include moist rales, low blood pressure and high pulse pressure. Severe cases may be fatal.
- Symptoms/injuries after skin contact : Direct contact with wet material or moist skin may cause severe irritation, pain, and possibly burns. Dry material is less irritating than wet material. This material is not a skin sensitizer.
- Symptoms/injuries after eye contact : This material is irritating to the eye. Direct contact may cause severe irritation, pain and burns, possibly severe, and permanent damage including blindness. The degree of injury depends on the concentration and duration of contact.
- Symptoms/injuries after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of normal use. Harmful if swallowed. Ingestion may cause immediate pain and severe burns of the mucous membranes. There may be discoloration of the tissues. Swallowing and speech may be difficult at first and then almost impossible. The effects on the oesophagus and gastrointestinal tract may range from irritation to severe corrosion. Oedema of the epiglottis and shock may occur.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may be delayed. Keep watching the victim. Probably mucosal damage may contraindicate to the use of gastric lavage.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Adapt extinguishing media to the environment. Water. MAJOR FIRE: Foam.
- Unsuitable extinguishing media : Use water only; no dry chemical, CO2 or Halon.

5.2. Special hazards arising from the substance or mixture

- Reactivity : Thermal decomposition may produce : Chlorine. nitrogen. Nitrogen trichloride. Cyanogen chloride, unstabilized. carbon oxides. Phosgene. The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

- Firefighting instructions : Exercise caution when fighting any chemical fire.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.
- Special protective equipment for fire fighters : Standard protective clothing and equipment (Self Contained Breathing Apparatus) for fire fighters.

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Specific methods : Using a 10% solution of sodium carbonate, thoroughly decontaminate fire-fighting equipment including all fire-fighting wearing apparel after the incident.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate unnecessary personnel.

6.1.1. For non-emergency personnel

Protective equipment : Protective clothing. Ventilate the area thoroughly, especially low lying areas (basements, work pits etc.). Protective goggles. Gloves.

Emergency procedures : Avoid contact with skin and eyes. Prevent dust cloud formation.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Stop leak if safe to do so. Stop release. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Recover mechanically the product. Do not add water to spilled material. Using clean dedicated equipment, sweep and scoop all spilled material, contaminated soil, and other contaminated material and place into clean, dry containers for disposal. Do not close drums containing wet or damp material. Do not transport wet or damp material.

6.4. Reference to other sections

For further information refer to section 8 Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Where excessive dust may result, use approved respiratory protection equipment.

Precautions for safe handling : Wear eye protection, face protection, protective clothing, Protective gloves. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid dust formation. Avoid breathing dust.

Hygiene measures : Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in original container. Store in a dry place. Store in a well-ventilated place. Keep cool. Protect from sunlight. Keep container tightly closed.

Incompatible products : acids.

Incompatible materials : Moisture.

Storage temperature : < 25 °C

Storage area : Store in a cool area. Store in a dry area.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls : 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. . Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment : Gloves. Protective clothing. Protective goggles. Use appropriate personal protective equipment when risk assessment indicates this is necessary.



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: White solid.
Odor	: slight chlorine-like
Odor threshold	: No data available
pH	: 5.5 - 6.5 @ 20°C
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Solubility	: Soluble in water.
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: 225 - 250 °C
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition may produce : Chlorine. nitrogen. Nitrogen trichloride. Cyanogen chloride, unstabilized. carbon oxides. Phosgene. The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

Contact with acids liberates toxic gas. NO contact with flammable substances.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

strong acids. Strong bases. Combustible materials. The active ingredient in this preparation is a strong oxidizing agent. The preparation of concentrated solutions or slurries is not recommended. Avoid contact with water on concentrated material in the container. Also avoid contact with easily oxidizable organic material: ammonia, urea or similar nitrogen containing compounds; inorganic reducing compounds; floor sweeping compounds; calcium hypochlorite and alkalis. Do not get water inside packaging.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Not classified.

sodium carbonate (497-19-8)

LD50 oral rat 2800 mg/kg (Rat; Experimental value)

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sodium carbonate (497-19-8)	
LD50 dermal rabbit	> 2000 mg/kg (Rabbit; Experimental value)
ATE CLP (oral)	2800.000 mg/kg body weight

troclosene sodium (2893-78-9)	
ATE CLP (oral)	500.000 mg/kg body weight

Skin corrosion/irritation	: Not classified pH: 5.5 - 6.5 @ 20°C
Serious eye damage/irritation	: Causes serious eye irritation. pH: 5.5 - 6.5 @ 20°C
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: This material contained in this tablet in solid form is not expected to produce respiratory effects. Particles of respiratory size are generally not encountered. The respirable fraction for the tablet active ingredient is typically less than 0.1% by weight for the granular and extra granular grades. If it is ground or otherwise in a powdered form, effects similar to a corrosive substance may occur. May cause severe irritation of the respiratory tract with coughing, choking, pain and possibly burns of the mucous membranes. If significant or prolonged exposure occurs, pulmonary oedema may develop, either immediately or more often within a period of 5-72 hours. The symptoms may include tightness in the chest, dyspnea, frothy sputum, cyanosis, and dizziness. Physical findings may include moist rales, low blood pressure and high pulse pressure. Severe cases may be fatal.
Symptoms/injuries after skin contact	: Direct contact with wet material or moist skin may cause severe irritation, pain, and possibly burns. Dry material is less irritating than wet material. This material is not a skin sensitizer.
Symptoms/injuries after eye contact	: This material is irritating to the eye. Direct contact may cause severe irritation, pain and burns, possibly severe, and permanent damage including blindness. The degree of injury depends on the concentration and duration of contact.
Symptoms/injuries after ingestion	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use. Harmful if swallowed. Ingestion may cause immediate pain and severe burns of the mucous membranes. There may be discoloration of the tissues. Swallowing and speech may be difficult at first and then almost impossible. The effects on the oesophagus and gastrointestinal tract may range from irritation to severe corrosion. Oedema of the epiglottis and shock may occur.
Likely routes of exposure	: Skin and eyes contact

SECTION 12: Ecological information

12.1. Toxicity

sodium carbonate (497-19-8)	
LC50 fish 1	300 mg/l (LC50; Other; 96 h; Lepomis macrochirus; Static system; Fresh water; Experimental value)
Threshold limit algae 1	242 mg/l (EC50; 5 days; Algae)

12.2. Persistence and degradability

sodium carbonate (497-19-8)	
Persistence and degradability	Biodegradability: not applicable. Low potential for adsorption in soil.
ThOD	Not applicable (inorganic)

12.3. Bioaccumulative potential

sodium carbonate (497-19-8)	
Log Pow	-6.19 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Waste treatment methods : Dispose of contents/container to comply with local/regional/national regulations.
- Waste disposal recommendations : Do not remove as household garbage.
- Additional information : Do not put product, spilled product, partially filled containers into the waste compactor. Contact with incompatible materials could cause a reaction and fire. Do not transport damp or wet material. Neutralize materials to a non-oxidizing state for safe disposal.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT: Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

- UN-No. (IMDG) : 3077
- Proper Shipping Name (IMDG) : Environmentally hazardous substance, solid, n.o.s. (Dichloroisocyanuric acid, salts)
- Class (IMDG) : 9 - Miscellaneous dangerous compounds
- Packing group (IMDG) : III - substances presenting low danger
- Limited quantities (IMDG) : Can be shipped as a limited quantity when packed in inner or single packs \leq 5 kg.

Air transport

- UN-No. (IATA) : 3077
- Proper Shipping Name (IATA) : Environmentally hazardous substance, solid, n.o.s. (Dichloroisocyanuric acid, salts)
- Class (IATA) : 9 - Miscellaneous Dangerous Goods
- Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

DANGER: Corrosive. Causes irreversible eye damage. Harmful if swallowed, inhaled, or absorbed through skin. Do not get in eyes, on skin, or clothing. Avoid breathing dust. Wear chemical-resistant gloves and safety glasses or face shield when making up solution. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

SECTION 16: Other information

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

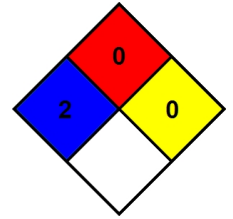
Full text of H-phrases:

H272	May intensify fire; oxidizer
H302	Harmful if swallowed
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

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NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
NFPA fire hazard : 0 - Materials that will not burn.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



Prepared by: Technical Department

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.