



Green Klean®

SOP Green Klean

SAFETY DATA SHEET

SECTION 1: Product and company identification

Product name: **CHLORINATED DISINFECTING TABLETS**

Use of the substance/mixture: Effervescent NaDCC

Tablets are used for surface disinfection and sanitizing and drinking water disinfection.

Company	SOP Green Klean 615 Industrial Dr. Cary, IL 60013
Emergency number	Chemtrec (800) 424-9300 or National Poison Center 1-800-222-1222

SECTION 2: Hazards Identification Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

2.1. Classification of the substance or mixture

Not classified for physical or health hazards at any concentration.

Not classified for environmental hazards at < 2500 ppm chlorine.

GHS-US classification

Eye	Irrit.	2A	H319
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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 outdoors or in a well-ventilated area
Recommended PPE, but not required. 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 (GHSUS)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable

Full text of H-phrases see section 16

3.2. Mixture

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
Name	Product identifier	%	GHS-US classification
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

4.2. Inhalation:

Short Term Exposure: no hazard identified

4.3. First Aid: Move person to fresh air. Call a physician if symptoms develop or persist.

4.4. Skin contact:

Short Term Exposure: no hazard identified

4.5. First Aid: Wash with soap and water. Get medical attention if irritation develops and persists.

4.6. Eye contact:

Short Term Exposure: Direct contact with eyes may cause temporary irritation.

4.7. First Aid: Rinse with water. Get medical attention if irritation develops and persists.

4.8. Ingestion:

Short Term Exposure: Not a likely route of exposure. No hazard identified

4.9. First Aid: Rinse mouth. Get medical attention if symptoms occur.

Note to Physician: Treat symptomatically

4.10. 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.



4.11. 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.

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

If contact is likely, safety glasses with side shields are recommended. For prolonged or repeated skin contact use suitable protective gloves. In case of insufficient ventilation, wear suitable respiratory equipment. 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.

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 General Ventilation

Personal protective equipment

Eye/face protection If contact is likely, safety glasses with side shields are recommended.

Skin protection

Hand protection For prolonged or repeated skin contact use suitable protective gloves.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment

General hygiene considerations 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**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)
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



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Aspiration hazard

Symptoms/injuries after inhalation
respiratory effects.

Not classified

This material contained in this tablet in solid form is not expected to produce

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
and possibly

Direct contact with wet material or moist skin may cause severe irritation, pain, burns. Dry material is less irritating than wet material. This material is not a skin sensitizer.

Symptoms/injuries after eye contact
pain and burns,

This material is irritating to the eye. Direct contact may cause severe irritation, possibly severe, and permanent damage including blindness. The degree of injury depends on the concentration and duration of contact.

Symptoms/injuries after ingestion
conditions of normal

Not expected to present a significant ingestion hazard under anticipated

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).

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 :5 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.

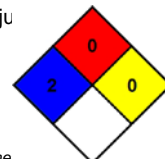
Full text of H-phrases

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

NFPA health hazard 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury 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 the 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