

## Instructions, Guidelines & Intended Use

This summary does not replace the full SDS. For complete hazard, handling, and regulatory information, please consult the SDS on the following pages.

### Intended Use / Product Description

FreshTek™ is a passive deodorization system designed to reduce persistent odors in enclosed or semi-enclosed spaces. The system operates by the controlled release of chlorine-dioxide-based vapor that reacts with odor-causing compounds in the air and in spaces with stale, unrefreshing air.

FreshTek does not contain fragrance and does not mask odors. It is intended for ambient odor control only. Not a disinfectant, sanitizer, or cleaner. May be used passively in kitchens and food prep areas when used as directed and kept away from food and food-contact surfaces. FreshTek makes no public health claims.

### Instructions

1. Mount or position the vented container in the preferred treatment area. Keep away from food-contact surfaces and out of reach of children and pets.
2. Remove pouch from outer packaging. Tear open the Mylar package and remove the sealed white Tyvek® pouch. Do not open or damage the pouch.
3. Insert pouch into container. Ensure vents remain unobstructed.
4. Begin passive odor control. The system provides continuous odor and air neutralization.
5. Service life: Effective for up to 30 days, depending on space size, airflow, humidity,

### Coverage Guide

15 g pouch: treats up to 1,250 cubic feet  
30 g pouch: treats up to 2,500 cubic feet  
60 g pouch: treats up to 5,000 cubic feet  
For larger spaces, multiple units may be used.

### Handling & Storage

Do not open, puncture, or alter the pouch.  
Do not mix with other chemicals or cleaners.  
Store unused pouches in a cool, dry place.  
Replace pouch after 30 days or when effectiveness diminishes.

### Exposure Controls & Precautions

**WARNING – CORROSIVE / IRRITANT**  
Avoid direct contact with pouch contents.  
Avoid inhalation of concentrated vapors.  
Use only in areas with normal ventilation.  
Keep out of reach of children and pets.

### Kitchen & Food Prep Use

For ambient odor control only.  
Do not place in direct contact with food or food-contact surfaces.  
Do not place inside refrigerators, ovens, or food containers.  
Not intended to sanitize food or surfaces.

### First Aid

Skin: Rinse with water; remove contaminated clothing.  
Eyes: Rinse cautiously with water for several minutes.  
Inhalation: Move to fresh air.  
Ingestion: Rinse mouth. Do not induce vomiting.

If pouch is torn and contents are inhaled, ingested or otherwise accidentally consumed, follow the first aid instructions listed earlier. Consult the SDS for specific concerns. If agitation, irritation or pain persists after following the first aid instructions call your local poison control agency. **Rocky Mountain Poison & Drug Safety: 1-800-222-1222.**

**Disclaimer:** This product must be used strictly in accordance with the provided instructions and the Safety Data Sheet (SDS). FreshTek™ assumes no responsibility for improper use, misuse, modification, or use outside the intended applications. The user is solely responsible for ensuring safe use, adequate ventilation, and compliance with all applicable laws, regulations, and safety guidelines. FreshTek makes no public health claims.

## Instrucciones y Uso Previsto

Este resumen no sustituye la SDS completa. Para información detallada sobre peligros, manejo y normativas, consulte la SDS de FreshTek en las páginas siguientes.

### Uso Previsto / Descripción del Producto

FreshTek™ es un sistema pasivo para neutralizar olores persistentes en espacios cerrados o semi-cerrados. Funciona mediante la liberación controlada de vapor a base de dióxido de cloro que reacciona con compuestos causantes de olor.

No contiene fragancia ni enmascara olores. Solo para control ambiental de olores. No es desinfectante ni limpiador. Puede usarse pasivamente en cocinas si se mantiene alejado de alimentos y superficies de contacto.

### Instrucciones

1. Monte o coloque el contenedor ventilado en el área deseada, lejos de superficies de contacto con alimentos.
2. Retire la bolsa del empaque Mylar. No abrir ni dañar la bolsa de Tyvek®.
3. Inserte la bolsa en el contenedor. No obstruya las ventilas.
4. Control pasivo de olores. El sistema comienza a neutralizar olores de forma continua.
5. Duración: Eficaz hasta 30 días, según el área y la ventilación.

### Guía de Cobertura

15 g: hasta 1,250 pies<sup>3</sup>  
30 g: hasta 2,500 pies<sup>3</sup>  
60 g: hasta 5,000 pies<sup>3</sup>  
Para áreas grandes, pueden usarse varias unidades.

### Manejo y Almacenamiento

No abrir ni perforar la bolsa.  
No mezclar con otros químicos.  
Almacenar en lugar fresco y seco.  
Reemplazar después de 30 días o cuando pierda efectividad.

### Controles de Exposición y Precauciones

**PELIGRO – CORROSIVO / IRRITANTE**  
Evitar contacto directo con el contenido.  
Evitar inhalar vapores concentrados.  
Usar solo en áreas ventiladas.  
Mantener fuera del alcance de niños y mascotas.

### Cocinas y Áreas de Preparación de Alimentos

Solo para control ambiental de olores.  
No colocar en contacto con alimentos o superficies que contacte alimentos  
No usar dentro de refrigeradores u hornos.  
No está diseñado para desinfectar.

### Primeros Auxilios

Piel: Enjuagar con agua.  
Ojos: Enjuagar cuidadosamente.  
Inhalación: Llevar a aire fresco.  
Ingestión: Enjuagar la boca. No provocar vómitos.

Si la bolsa se rompe y el contenido es inhalado, ingerido o consumido accidentalmente, siga las instrucciones de primeros auxilios indicadas anteriormente. Consulte la SDS para inquietudes específicas. Si la agitación, irritación o el dolor persisten después de seguir las instrucciones de primeros auxilios, llame a su centro local de control de intoxicaciones. **Rocky Mountain Poison & Drug Safety: 1-800-222-1222.**

**Aviso Legal:** Este producto debe utilizarse únicamente conforme a las instrucciones y a la Hoja de Datos de Seguridad (SDS). FreshTek™ no asume responsabilidad por el uso indebido, modificación o uso fuera de las aplicaciones previstas. El usuario es responsable de su uso seguro y del cumplimiento de las normas aplicables.

# FreshTek

Safety Data Sheet

March 2026

## Section 1 : Identification

**1.1 Product Identifier - Trade Name:** FreshTek Chlorine Dioxide Generating Sachets - Product Code: FT-CDS-01 - Internal Lot/Batch No.: [ ]

**1.2 Alternate Identification** - Synonyms: ClO<sub>2</sub> Deodorizer Pouch; Sodium Chlorite/Citric Acid Sachet - Chemical Family: Inorganic Oxidizing Solid System

**1.3 Intended Use & Limitations** - Intended Purpose: Controlled generation of chlorine dioxide vapor for deodorizing and odor reduction in enclosed spaces. - Use Limitations: Not for direct dermal, ocular, or mucosal contact; authorized for industrial/professional applications only.

**1.4 Supplier Information & Authority** - Manufacturer/Supplier: FreshTek, LLC; Denver, CO

Customer Support: +1-800-555-1234; team@freshtek.com

**1.5 Emergency Contact** - Rocky Mountain Poison & Drug Safety: 1-800-222-1222

## Section 2: Hazard Identification

**2.1 GHS Classification** - Combustible dust – Acute toxicity, oral (Category 4), H302 – Acute toxicity dermal (Category 3), H311 – Acute toxicity, inhalation; dust, mist (Category 4), H332 – Skin corrosive (Category 1B), H314 – Eye damage (Category 1), H318 – Specific Target Organ Toxicity (repeated exposure), (Category 2), H373 – Aquatic acute toxicity (Category 1), H400

**2.2 Signal Word & Hazard Statements** - Signal Word: DANGER - Hazard Statements: - H272: May intensify fire; oxidizer. - H302: Harmful if swallowed. - H314: Causes severe skin burns and serious eye damage. - H335: May cause respiratory irritation.

**2.3 Precautionary Statements** - Prevention: - P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do NOT tear open pouch. Dispose of pouch if torn or broken open. - P220: Keep/Store away from combustible materials. - P261: Avoid breathing dust/vapors. - P264: Wash thoroughly after handling. - P280: Wear protective gloves/eye protection/face protection. - Response: - P301+P330+P331: **IF SWALLOWED:** Rinse mouth. Do NOT induce vomiting. - P302+P352: **IF ON SKIN:** Wash with plenty of water. - P305+P351+P338: **IF IN EYES:** Rinse cautiously with water for several minutes. - P310: Immediately call a poison center or physician. - Storage: - P403+P235: Store in a well-ventilated place. Keep cool. - P405: Store locked up. - **Disposal:** - P501: **Dispose of contents/container in accordance with local/regional/national regulations.**

**2.5 Other Hazards** - Dust Explosion: Finely dispersed dust may present an explosive hazard when exposed to ignition sources. - Gas Explosion: Chlorine dioxide vapor concentrations in air exceeding approximately 10% v/v may undergo violent decomposition.

System	Health	Flammability	Reactivity
NFPA	3	0	2
HMIS	3*	0	2



Substance	CAS No.	Con (%)	EC No.	GHS Classification
Sodium Chlorite	7758-19-2	15-30	231-836-8	Ox. Sol. 1, H271 Acute Tox. 2 (Dermal) H310 Acute Tox. 3(Oral), H301 Acute Tox. 2 (Inhalation) H330 Skin corrosion 1B, H314 Eye damage 1, H318 Aquatic acute 1, H400 Aquatic chronic 3, H412
Citric Acid	77-92-9	55-75	201-069-1	Eye Irrit. 2A, Combustible dust
Calcium Chloride	10043-52-4	12-26	233-140-8	Eye Irrit. 2A, Combustible Dust, category 2

Composition withheld as trade secret; total proprietary fraction ≤10% w/w.

## Section 4: First-Aid Measures

**4.1 Description of Measures** – Direct Inhalation: Evacuate to fresh air immediately. If respiration is labored, administer oxygen. Seek medical attention. - Skin Contact: Remove contaminated clothing; flush contact area with copious water for ≥20 minutes. Obtain dermatologist consultation. - Eye Contact: Rinse with gentle water stream for ≥20 minutes, ensuring eyelid eversion. Urgent ophthalmological evaluation required. - Ingestion: Do not induce emesis. Administer water to dilute. Seek emergency medical intervention immediately.

**4.2 Symptoms & Effects** – Acute: Dermal and ocular burns, pulmonary irritation, gastric distress. Dangerous to inhale directly. - Delayed: Potential chemical pneumonitis, systemic toxicity via corrosive injury to gastrointestinal mucosa.

**4.3 Medical Guidance** - Provide supportive treatment. Monitor vital functions. Administer symptomatic burn and fluid management. Consider bronchodilators for airway compromise.

## Section 5: Fire-Fighting Measures

**5.1 Extinguishing Media** - Approved: Water spray, water mist, foam (AFFF), dry chemical. - Not Approved: Single-agent CO<sub>2</sub> systems, as inadequate for oxidizer fires. Do NOT use a stream of H<sub>2</sub>O, this may spread combustion.

**5.2 Fire Hazards** - Oxidizer; may catalyze combustion of adjacent materials. Thermal decomposition liberates Cl<sub>2</sub>, O<sub>2</sub>, ClO<sub>2</sub>.

**5.3 Protective Equipment** - Full turnout gear, including SCBA with pressure-demand mode, chemical-resistant gloves and boots.

**5.4 Tactical Considerations** - Fight fire from maximum safe distance; apply water spray to cool exposures. Prevent runoff into sewers or watercourses.

## Section 6: Accidental Release Measures

**6.1 Personnel Precautions** - Small Spill: Wear nitrile gloves, safety goggles, and particulate respirator (Standard PPE). - Major Spill: Seal area; don SCBA, chemical suit, double gloves; restrict access; establish exclusion zone.

**6.2 Environmental Controls** - Contain spill; prevent discharge into storm drains or waterways. Notify regulators if release exceeds reportable quantities.

**6.3 Cleanup Protocol** - Dike with inert materials (vermiculite); collect into approved UN-rated containers. Decontaminate area with dilute bisulfite solution to neutralize residual oxidizer.

**6.4 References** - Refer to Sections 8 and 13 for PPE and disposal parameters.

## Section 7: Handling and Storage

**7.1 Safe Handling Practices** - Employ dust control. Adhere clear pouch compartment to the wall. Utilize non-sparking tools. Avoid exposure to moisture and acids. Dispose of pouch using gloves after 30 days of use.

**7.2 Storage Conditions** - Store in original packaging in a cool (59–77°F), dry, well-ventilated facility. Separate from flammables, reducing agents, and acids. - Implement secondary containment in compliance with industry standards.

**7.3 Legal Compliance** - If used as an EPA-registered biocide (EPA Reg. No. [87508-2]), adhere strictly to label-directed application rates and recordkeeping mandates.

## Section 8: Exposure Controls/Personal Protection

### 8.1 Occupational Exposure Limits

Constituent	OSHA PEL	ACGIH TLV	IDLH
Sodium Chlorite	Not Established	0.1 mg/m <sup>3</sup> (TWA)	Not Established
Citric Acid	10 mg/m <sup>3</sup> (TWA)	10 mg/m <sup>3</sup> (TWA)	Not Established
Calcium Chloride	Not Established	Not Established	Not Established
Chlorine Dioxide	Ceiling 0.1 ppm	Ceiling 0.1 ppm	5 ppm

Do NOT use more than one 15-gram pouch per 30 days within an area of 1250ft<sup>3</sup>

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**8.2 Engineering Measures** – Use or install local exhaust ventilation w/ hoods and scrubbers. Continuous atmosphere monitoring for ClO<sub>2</sub> concentration.

**8.3 Personal Protective Equipment** - Respiratory: Full-face respirator with ClO<sub>2</sub>-specific cartridges or SCBA for >IDLH situations. - Hand Protection: Nitrile gloves (minimum 4-hour breakthrough resistance); double-layer for large-scale handling. - Eye/Face: Tightly sealed chemical goggles and full-face shield. - Skin/Body: Chemically resistant coveralls, apron, and footwear.

**8.4 Hygienic Practices** - Prohibit food, beverages, and tobacco use in work areas. Perform thorough handwashing and change contaminated clothing immediately.

## Section 9: Physical and Chemical Properties

Property	Specification
Physical Form	Free-flowing granular powder
Color	Off-white to white
Odor	Faint chlorine-like aroma
Odor Threshold	Not available
pH (10% aqueous slurry)	5.5–6.5
Melting/Decomposition Temperature	Decomposes at >190°C
Solubility	30 g/100 mL water (20°C)
Bulk Density	0.8–1.0 g/cm <sup>3</sup>
Vapor Pressure	Negligible under ambient conditions
Explosive Limits (ClO <sub>2</sub> vapor)	LEL ~10% v/v; UEL not established
Autoignition Temperature	Not applicable

## Section 10: Stability and Reactivity

**10.1 Reactivity** - Class: Strong oxidizing agent; may induce combustion in contact with reducing substances. Do NOT mix with ethanol due to chance of explosion. Do NOT submerge pouch in water containing organic material. Pouches have a sensitivity to heat, friction and impact.

**10.2 Chemical Stability** - Stable if maintained in airtight, dry storage; avoid elevated temperatures and humidity. Follow table showing occupational exposure limits (Section 7).

**10.3 Potential Hazardous Reactions** - Acidic or aqueous conditions liberate ClO<sub>2</sub>; risk of detonation under confined high-concentration scenarios. Risk of oxidation. Do not mix with organic material. Do not put out any

**10.4 Avoidance Conditions** - Avoid exposure to moisture, acids, organics, dust accumulation, and extreme heat.

**10.5 Incompatible Materials** - Flammable liquids, organic solvents, sulfurous compounds, metal powders.

**10.6 Decomposition Products** - Release of Cl<sub>2</sub>, ClO<sub>2</sub>, O<sub>2</sub>, and trace chlorinated organics upon thermal or chemical breakdown.

## Section 11: Toxicological Information

**11.1 Acute Toxicity** - Oral (rat, sodium chlorite): LD<sub>50</sub> = 1200 mg/kg - Inhalation (rat, aerosol): LC<sub>50</sub> >1.5 mg/L (4h) - ATEmix Calculation: Oral ~1500 mg/kg; Inhalation ~2 mg/L (4h)

### 11.2 Skin Corrosion/Irritation

Causes severe skin burns and eye damage. With correct usage, there should be no contact with skin or eyes.

### 11.3 Eye Damage/Eye Irritation

Causes serious eye damage if used inappropriately, with a damaged pouch and direct contact to the eyes.

### 11.4 Respiratory or Skin Sensitization

Not classified as a sensitizer.

### 11.5 Germ Cell Mutagenicity

Not classified as mutagenic.

### 11.6 Carcinogenicity

Not classified as carcinogenic by OSHA, NTP, IARC or ACGIH.

**11.7 Specific Target Organ Toxicity (STOT):** Single exposure not classified. Repeated exposure may cause damage to organs. Never damage the pouch. With proper usage, there is no contact with the chemicals inside the pouch.

## Section 12: Ecological Information

**12.1 Aquatic Toxicity** - Fish (96h LC<sub>50</sub>): 45 mg/L - Daphnia magna (48h EC<sub>50</sub>): 32 mg/L

**12.2 Persistence & Degradability** - Readily oxidizes and degrades to chloride and chlorate under aerobic aquatic conditions.

**12.3 Bioaccumulation Potential** - Low (log Kow <1);

**12.4 Mobility - High water solubility;** likely to migrate to groundwater. Dispose of used FreshTek pouches according to local waste rules and regulations.

**12.5 Other Adverse Effects** - Contributes to oxidative stress in aquatic organisms at elevated concentrations.

## Section 13: Disposal Considerations

Classify residues as hazardous waste per RCRA D002. **Do NOT dispose of in water pathways. Dispose properly in accordance with local waste**

Contaminated packaging: Triple-rinse, deface labels, and recycle or dispose as hazardous waste in compliance with local regulations.

## Section 14: Transport Information

Regulation	UN Number	Proper Shipping Name	Class	PG	ERG#
DOT (49 CFR)	UN1479	Oxidizing solid, n.o.s. (sodium chlorite)	5.1	II	138
IATA	UN1479	Oxidizing solid, n.o.s.	5.1	II	138
IMDG	UN1479	Oxidizing solid, n.o.s.	5.1	II	138

## Section 15: Regulatory Information

US TSCA: All constituents are listed or exempt.

CERCLA Reportable Quantity: Sodium Chlorite – 454 kg.

EPCRA (SARA) 311/312: Oxidizer, Acute Toxicity, Skin Corrosive.

EPCRA (SARA) 313: Not applicable.

EPA Registration: [If registered, include Reg. No.].

California Prop 65: No listed chemical constituents.

Canadian WHMIS: Classes C (Oxidizing Material), E (Corrosive Material).

EU REACH: Sodium Chlorite identified as SVHC candidate.

## Section 16: Other Information

Preparation Date: 06/26/2025

Revision Date: [8/4/2025]

Revision Number: 3.3 (This supersedes Revision 3.2)

**Legal Disclaimer; Terms of Use:** This Safety Data Sheet (“SDS”) is provided by FreshTek, LLC pursuant to its obligation under the OSHA Hazard Communication Standard (29 CFR 1910.1200). The content of this SDS is based on information believed to be accurate as of the date indicated. The Company expressly disclaims all warranties, whether express or implied, including but not limited to merchantability, fitness for a particular purpose, and non-infringement of third-party rights. This SDS is intended only as a guide for the safe use, handling, storage, transportation, and disposal of FreshTek Chlorine Dioxide Generating Sachets by professional, trained personnel. It does not represent a contractual specification and should not be construed as a guarantee or assurance of product performance or characteristics.

**User Obligations:** - User must ensure that all individuals handling or exposed to the product have access to and understand this SDS, and have received appropriate training in hazard recognition and mitigation. - User must perform risk assessments and verify that control measures (engineering, administrative, personal protective equipment) are adequate for the intended operation. - User is responsible for compliance with all local, state, federal, and international regulations governing the use, transport, storage, and disposal of this product.

**Limitation of Liability:** - Under no circumstances shall the Company or its affiliates, directors, officers, employees, agents, successors, or assigns be liable for any direct, indirect, incidental, special, punitive, or consequential damages, losses, or expenses (including loss of profits, business interruption, or loss of data) arising out of or in connection with the use of or reliance on this SDS or the product described herein, even if advised of the possibility of such damages.

**Indemnification:** - User agrees to indemnify, defend, and hold harmless the Company and its affiliates from and against any and all claims, liabilities, damages, losses, and expenses (including reasonable attorneys' fees) arising out of or resulting from any use, handling, storage, or disposal of the product in violation of this SDS or applicable law.

**Revision & Updates:** - This SDS is subject to revision without notice. Users should review the SDS periodically and obtain the most current version by contacting FreshTek, LLC.

Sources cited: <https://cameochemicals.noaa.gov/chemical/370>, <https://www.osha.gov/chemicaldata/16>, <https://www.cdc.gov/niosh/npg/npgd0116.html>, [www.scirp.org/journal/paperinformation?paperid=115959](http://www.scirp.org/journal/paperinformation?paperid=115959), [www.osha.gov/sites/OSHA3514.pdf](http://www.osha.gov/sites/OSHA3514.pdf)

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