# MATERIAL SAFETY DATA SHEET

Issue Date: 26/03/2024

#### Section 1: Product and Company Information

Product Name:	Cleansair Sanitizer Card
Product Use:	Deodorizing delivery system (pouch) for the generation of chlorine dioxide and Bamboo Charcoal, to use as control of odor-causing
	bacteria, mold, mildew and chemical odors in confined spaces where moisture is present.
Company:	Shoppflix China Supplies Co., Ltd
Address:	Po Box 1996 GuangDong China
Technical Phone:	+1(407)-212-1571
Emergency Phone	+1(407)-212-1571

#### Section 2: Product Description

Definition:	The product has a Provisional US Patent, number 63/629,385 dated November 14, 2023 as a Chlorine Dioxide Generator (low emission).
Presentation:	The product is commercialized in bags, that protects from light and is waterproof.
Sanitizer Card:	The card has a double safety structure, the internal gas permeable container that storages, 4 grams of the chemical compound and, the external non-permeable container - body to protect the contents from light and water.



Safety:	Due to the low levels of Chlorine Dioxide gas generated at one setting,
	a concentration below 100 ppm has no effect on humans or pets. All
	bacterial propagules and many pathogenic bacteria can be killed at 0.1
	ppm. The max concentration observed of the chlorine dioxide gas
	generated by the card, in an area of 10 sqf is 1.2 ppm.
Handling:	There is no special requirement to manipulate the final retail product. As
	it is presented as not hazardous. The bags containing the product are
	resistant to major impacts not degrading

### Section 3: Composition / Information on Ingredients

Components: Total weight 4 grams per unit				
Chemical Name	CAS Number	% (by weight)	Exposure Standards	
Bamboo Charcoal	8021-96-6	15.0 - 17.0	None Established	
Sodium Chlorite	7758-19-2	15.5 – 16.5	None Established	
Sodium Chlorate	7777-09-9	0.8 max	None Established	
Sodium Hydroxide	1310-73-2	0.6 max.	OSHA: 2 mg/m	

The product as is has no trace of Chlorine Dioxide gas

#### **Section 4: Hazards Identification**

Emergency Overview:	White and Brown granules, no odor. May cause irritation or burns to skin and eyes in contact directly if opened the pouch.
Potential Health Effects:	Eye: direct contact with this product may cause severe irritation and possibly burns with symptoms of redness, tearing, and eye damage due to burns.
Skin:	Direct contact with this product may cause severe irritation and/or burns with symptoms of itching, redness, swelling and possible skin damage.
Ingestion:	Swallowing this product may be extremely harmful with symptoms of nausea, vomiting, lethargy, diarrhea, bleeding or ulceration. May cause anemia due to the oxidizing effects of sodium chlorite.
Inhalation:	Inhaling this product may cause irritation of the mucous membranes and respiratory tract with symptoms of sneezing, coughing and bloody nose. Severe overexposures may cause lung damage

#### **Section 5: First Aid Measures**

Eye:	Immediately flush eyes with water for at least 15 minutes, lifting eyelids to
	thoroughly flush. If redness or irritation persists, get prompt medical attention.
Skin:	Remove contaminated clothing and flush affected skin area with copious
	amounts of water for at least 15 minutes. Seek medical attention if burning or
	irritation of the skin persists. Launder clothing before reuse.
Ingestion:	Drink large quantities of water and seek medical attention immediately. DO NOT
	induce vomiting. DO NOT give anything by mouth if the person is unconscious or
	having seizures.
Inhalation:	Remove to fresh air. If irritation or discomfort persists, administer oxygen and seek medical attention immediately.

**Notes to Physician**: Chlorine dioxide vapors are emitted when this product contacts water, acids or chlorine. If these vapors are inhaled, monitor the patient closely for delayed development of pulmonary edema which may occur up to 48-72 hours post inhalation.

### **Section 6: Fire Fighting Measures**

Flash Point Auto ignition	Not Applicable
Temperature	Not Applicable
Flammable Limits in Air	Not Applicable
(percent by volume)	
Extinguishing Media	Not Applicable- Choose extinguishing media suitable for surrounding materials
Fire Fighting Techniques and	Approach fire from upwind to avoid hazardous vapors and
Comments	toxic decomposition products. Use flooding quantities of water as fog or spray. Use water spray to keep
	fire-exposed containers cool. Extinguish fire using agent
	suitable for surrounding fire. Wear self-contained breathing
	apparatus and protective clothing when fighting fires
	involving chemicals

#### Section 7: Release of raw material

**Measures Procedure(s) of Personal Precautions(s):** Wear respirator, chemical safety goggles, rubber boots, and rubber gloves.

**Methods for Cleaning Up:** Sweep up, place in a bag and hold for waste disposal. Ventilate area and wash spill site with large amounts of water after material pickup is complete.

### Section 8: Handling and Storage of non packaged materials

**Handling:** Wear all recommended personal protective clothing when handling. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Storage: Store in a cool, dry place and ensure that there is adequate ventilation. Do not expose to direct light. Do not expose to moisture during storage. This product is hydroscopic and will readily absorb moisture. Should only be opened from the packaging pouch prior to use.

### Section 9: Exposure Control / Personal Protection Engineering Control for non packaged materials

Local exhaust ventilation is recommended if vapors, mists or aerosols are generated. Otherwise, use general exhaust ventilation. Eye Protection: Chemical safety glasses or goggles Skin Protection: Chemical-resistant gloves, clothing, and boots. Respiratory: NIOSH/MSHAapproved respirator is recommended in absence of proper environmental control. General: Provide ventilation to control worker exposure and prevent health risk. Provide an eyewash fountain and safety shower in close proximity to points of potential exposure.

### **Section 10: Physical and Chemical Properties**

**Appearance and Odor:** White and Brown granule Odor: no odor Melting Point: o o 350 F (177 C) Decomposition Temperature: 347 °F (175 °C) Solubility in water: Complete Bulk Density No data pH @ 25°C: No data Vapor Pressure: No data Specific Gravity: No data Volatiles (% by volume): No data

#### Section 11: Stability and Reactivity Chemical Stability:

**Stable Conditions to Avoid:** Temperatures above 347 °F (175 °C), do not store dry product where exposed to moist conditions and contamination with combustible materials **Incompatibility:** Acids, reducing agents, combustible materials, oxidizers (eg. hypochlorites), sulfur-containing rubber, dirt, soap, solvents, paints.

**Decomposition Products:** Toxic chlorine dioxide gas will be generated on contact with acids or chlorine

Hazardous Polymerization: Will not occur.

#### Section 12: Toxicology Information Routes of Exposure:

**Inhalation:** Inhalation may cause irritation of the mucous membranes and respiratory tract. Symptoms may include coughing, bloody nose, and sneezing. Severe overexposures may cause lung damage.

**Skin:** Direct contact may cause severe irritation and/or burns with symptoms of redness, itching, swelling and possible destruction of tissue

**Eye:** Mist or direct contact may cause severe irritation and possibly burns. Symptoms may include tearing, redness and in severe cases, eye damage due to burns

**Ingestion:** Gastroenteritis with any or all of the following symptoms: nausea, lethargy, diarrhea, bleeding or ulceration. Acute ingestion of large quantities may also cause anemia due to the oxidizing effects of the chemical.

**Carcinogenicity Sodium chlorite** is not listed in OSHA, EPA, NTP, IARC or any other authority as a carcinogen.

**Reproductive Toxicity** No effects were observed at 100 ppm or higher concentration of sodium chlorite in the drinking water in animal testing

### Section 13: Ecological Information

**Ecotoxicological Information**: Sodium chlorite is slightly toxic to fish and other aquatic organisms. For bluegill (Lepomis macrochirus), aquatic toxicity studies have shown a TL50 of 208 mg/l and LC50 values of 265-310 mg/l. rainbow trout (Salmo gairdneri) have been tested and shown acute toxicity values of 50.6 mg/l (TL50) and 290 mg/l (LC50). Of the aquatic species tested, Daphnia have been the most sensitive species tested with an LC50 of 0.29 mg/l. Sodium chlorite is acutely toxic to birds when administered by gavage. The acute oral LD50 in mallard ducks is 0.49-1.00 g/kg. In bobwhite quail the LD50 is 0.66 g/kg. Sodium chlorite in the diet of birds was not acutely toxic. Eight day dietary LC50's in mallard ducks and bobwhite quail were both greater than 10,000 ppm in the diet.

#### **Environmental Fate Information**

**Soil:** Sodium chlorite could generate chlorine dioxide when in contact with acidic soil. However both sodium chlorite and chlorine dioxide will degrade to sodium chloride in the presence of reducing agents in soil.

**Water:** Sodium chlorite in water will eventually degrade to sodium chlorite in the presence of reducing agents in natural water.

### Section 14: Disposal Considerations of non packaged materials

If the contents (chemicals) supplied in bulk quantities become a waste, it meets the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA), 40 CFR Part 261. All disposals of this material must be done in accordance with local, State and Federal laws and regulations.

### Section 15: Transport Information of non packaged materials

The chemicals if transported in raw bulk quantities is regulated as a DOT hazardous material. DOT Shipping Description (49 CFR 172.101) Sodium Chlorite, 5.1, UN 1496, II The applicable packaging section is 49 CFR 173.4 (small quantity - maximum amount of sodium chlorite per individual receptacle is 30 grams). Oxidizer placard not required. Outside package must be marked as follows: "This package conforms to 49 CFR 173.4."

#### **Section 16: Regulatory Information**

TOXIC SUBSTANCES CONTROL ACT: The components of this product are listed on the Toxic Substance Control Act (TSCA) inventory SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) TITLE III HAZARD CATEGORIES (40 CFR 370.2) HEALTH: Immediate (Acute), Delayed (Chronic) PHYSICAL: Fire EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW (40 CFR 355, APP.A) EXTREMELY HAZARDOUS SUBSTANCE (EHS) PLANNING QUANTITY: None Established SUPPLIER NOTIFICATION REQUIREMENTS, PER 40 CFR 372.45 None Required

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