

SAFETY DATA SHEET

"PURE-X","PureFx"

SECTION 1 • COMPANY AND CHEMICAL IDENTIFICATION

ORIN Technologies, LLC. 405 Investment Court Verona, WI 53593 608-838-6699

EMERGENCY RESPONSE NUMBERS: 8 AM - 5 PM CST: 608-838-6699 5 PM- 8 AM CST, Nights & Weekends: 262-821-7024

Or

SUBSTANCE: Inorganic Oxidizing Agent 24-Hour Emergency Chemtrec: 800-424-9300

PRODUCT/TRADE NAMES/SYNONYMS: "PureX. PureFX

Recommended Use and Restrictions: When activated, product generates aqueous chlorine dioxide. This product is to be used as a disinfectant or sanitizer on hard, non-porous surfaces, as an antimicrobial agent in poultry processing, and to wash fruits and vegetables that are not raw agricultural commodities. There are no known restrictions.

CREATED BY: ORIN Technologies, LLC

CREATION DATE: 03/15/2019

SECTION 2 • HAZARD IDENTIFICATION

DRY PRODUCT: Sodium chlorite SIGNAL WORD: DANGER CATEGORY: Oxidizing solids (category 2)



May intensify fire, oxidizer



Causes burns to skin, serious eye damage.



Respiratory tract irritant. Skin and Eye irritant.

Precautionary statements: Wash exposed areas after handling, wear protective gloves, avoid breathing fumes/ gas/mist/vapors/spray. Use only in a well ventilated area. If skin irritation occurs, get medical attention. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if easy to do so. If eye irritation persists, get medical attention. If inhaled, remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell. Take off contaminated clothing and wash before reuse.

SECTION 3 • COMPOSITION/INFORMATION ON INGREDIENTS

DRY PRODUCT

COMPONENT CASRN **RANGE** Activator* 55-85% Sodium Chlorite 7758-19-2 15-40%

Inert³ ≤ 2% *Proprietary ingredients N/A

SECTION 4 • FIRST AID MEASURES

CONTACT WITH DRY PRODUCT

SKIN: Brush off loose product. Rinse skin immediately with plenty of water, then wash area with soap and water. Call a poison control center or doctor for treatment advice.

EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing the eye. Seek medical attention immediately.

INGESTION: Call a poison control center or doctor immediately for treatment advice. Have person drink large quantities of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

INHALATION: Remove individual from exposure to chemical. Seek fresh air. If individual is not breathing, administer CPR. If breathing is labored, seek medical attention.

SECTION 5 • FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARD: Sodium chlorite in the unactivated product is a strong oxidizer, and can support combustion in the absence of air.

EXTINGUISHING MEDIA: Fire-exposed containers should be watered and cooled with water fog. Decomposition can release oxygen that supports combustion and reduces effectiveness of suffocation-type extinguishing agents.

FIREFIGHTING: Wear full protective clothing and self-contained breathing apparatus with full facepiece (pressure-demand, NIOSH-approved). Approach fire from upwind to avoid hazardous vapors and toxic decomposition products.

HAZARDOUS COMBUSTION PRODUCTS: Decomposition can release oxygen that supports combustion and reduces effectiveness of suffocation-type extinguishing agents. Thermal decomposition products from incomplete combustion (pyrolysis) include carbon monoxide, carbon dioxide, and inorganic chlorine compounds.

SECTION 6 • ACCIDENTAL RELEASE MEASURES

DRY PRODUCT:

If contents of pouch are exposed, spilled, or otherwise introduced into the environment:

- Wear protective rubber gloves (see manufacturer details for tolerances)
- Wear protective goggles or other eye protection
- Wear an approved NIOSH mask to prevent inhaling fumes/dust
- Place contents on pouch in a plastic container
- Fill container with water to allow degradation/neutralization

SECTION 7 • HANDLING AND STORAGE

HANDLING: Use product as directed by label. Avoid contact with eyes, skin or clothing. Wash thoroughly after handling. Thoroughly rinse any protective gear and handling equipment used prior to storage and reuse.

STORAGE: Observe all applicable regulations when storing this substance. Keep unactivated product in a cool, dry, ventilated area away from direct sunlight. Do not store with acids, chlorine and chlorine compounds, hypochlorites (bleach), organic solvents, sulfur and sulfite compounds, phosphorus, and combustible/flammable materials. Do not store in areas where sparking may occur.

SECTION 8 • EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: General exhaust ventilation is sufficient for safe use of this product. Avoid breathing any vapors, mists or fumes generated by inactivated chemicals. Local exhaust ventilation or NIOSH approved mask may be appropriate in applications, in confined spaces or where large quantities are used.

EYE PROTECTION: When handling dry ingredients approved safety goggles or face shield should be worn.

EMERGENCY WASH FACILITIES: None normally required when handling intact product. Safety shower and chemical eyewash facilities may be necessary if handling large quantities of dry ingredients.

GLOVES: None normally required when handling intact product. If handling exposed dry ingredients in product, use appropriate hand protection. Gloves made of rubber, neoprene or other chemically impervious gloves may be suitable. Consult glove manufacturer.

RESPIRATOR: None normally required when handling intact product. If dry chemicals are exposed, A NIOSH-approved air-purifying respirator or a NIOSH approved canister/cartridge respirator rated for chlorine/acid gas or specified for chlorine dioxide may be appropriate.

FOR FIREFIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH CONDITIONS: For firefighting, see section 5

EXPOSURE LIMITS:

<u>COMPONENT</u>	CASRN	<u>OSHA</u>	<u>ACGIH</u>	NIOSH
Activator	N/A	None Listed	None Listed	None Listed
Sodium Chlorite	7758-19-2	None Listed	None Listed	None Listed
Inert	N/A	15 mg/m3^*	10 mg/m3^*	None Listed

[^]Time Weighted Average

SECTION 9 • PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:

Dry Product-white powdery substance.
UPPER/LOWER FLAMMABILITY LIMITS: NA ODOR: Dry Product-NA VAPOR PRESSURE: NA ODOR THRESHOLD: 0.1 PPM VAPOR DENSITY: NA pH: NA RELATIVE DENSITY: NA MELTING/FREEZING POINT: NA

SOLUBILITY: COMPLETE INTIAL BOILING POINTAND BOILING RANGE: NA FLASH POINT: 185°C **EVAPORATION RATE: NA** FLAMMABILITY: NA PARTITION COEFFICIENT: NA **AUTO-IGNITION TEMPERATURE: NA** DECOMPOSITION TEMPERATURE: 160°C VISCOSITY: NA

⁺Particulates Not Otherwise Regulated





SECTION 10 • STABILITY AND REACTIVITY

STABILITY: Product is stable under normal storage conditions. Ingredients are oxidizers and may decompose if heated above 160 °C, opened, or wetted.

CONDITIONS TO AVOID: Avoid storing product where it might become wet, or where the spilled contents of a damaged, unactivated pouch could dry to a crystalline salt or produce chlorine dioxide gas. Do not store where dry material may come into contact with sparking.

INCOMPATIBILITIES: Avoid accidental contact of dry ingredients or activated product with acids, chlorine compounds, hypochlorites (bleach), sulfur and sulfite compounds, phosphorus, organic solvents, and combustible/flammable materials.

HAZARDOUS DECOMPOSITION: Exposure of dry ingredients or activated product to acids or chlorine compounds can produce uncontrolled release of chlorine dioxide gas.

SECTION 11 • TOXICOLOGY INFORMATION

CARCINOGEN STATUS: Not Listed.
TARGET ORGANS: Skin, eyes.
ADDITIONAL DATA: None.

HEALTH EFFECTS OF UNACTIVATED PRODUCT: None anticipated under normal

conditions of use. Contact with dry ingredients may cause burns.

INHALATION: None anticipated under normal conditions of use. SKIN CONTACT: None anticipated under normal conditions of use. EYE CONTACT: None anticipated under normal conditions of use; however, eye contact with dry ingredients may cause irreversible eye damage. INGESTION: None anticipated under normal conditions of use.

DERMAL SENSITIZATION: Repeated exposure unlikely due to acute effects.

ACUTE INHALATION: NA CARCINOGEN STATUS: OSHA: Not Listed

NTP: Not Listed. IARC: Not Listed.

TARGET ORGANS: Skin, eyes, respiratory tract, mucous membranes.

ADDITIONAL DATA: None.

SECTION 12 • ECOLOGICAL INFORMATION

ACUTE AQUATIC TOXICITY: Not applicable.
DEGRADABILITY: Decomposes in water.
BIOCONCENTRATION FACTOR (BCF): Not applicable.
OCTANOL/WATER PARTITION COEFFICIENT: Not applicable.

SECTION 13 • DISPOSAL INFORMATION

Unactivated product should be disposed in accordance with all federal, state and local regulations.

SECTION 14 • TRANSPORTATION INFORMATION

D.O.T. Classification: 5.1, Packing group II, Oxidizer D.O.T. Identification number: UN Number: 1496 Conforms to 49 CFR 173.4 for road and rail transfer IATA: Dangerous goods in excepted quantities

SECTION 15 • REGULATORY INFORMATION

<u>US FEDERAL REGULATIONS:</u> Clean Air Act: Not applicable.

Reportable Quantity: none established

Toxic Substances Control Act: Sodium chlorite listed on TSCA inventory

SARA Title III: Sodium chlorite is subject to reporting requirements of Section 313 of Title III of the 1986 Superfund Amendments and Reauthorization Act (SARA) and 40 CFR Part 372

ACUTE HAZARD: Irritant.
CHRONIC HAZARD: None known.
FIRE HAZARD: Oxidizer.
REACTIVITY HAZARD: Oxidizer.
SUDDEN RELEASE HAZARD: Not applicable.

STATE REPORTING REQUIREMENTS: California Proposition 65: Not regulated.

New Jersey: See Section II.

SECTION 16 • OTHER

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