



## Material Safety Data Sheet

Emergency Phone: (800) 424-9300  
International Emergency Phone: 703-527-3887

### Section 1 - Identification

Product Code: 193-0101-01  
Product Name: Chlorine Dioxide Electrolyte Powder  
Used in Part Number: 193-0101-05, 193-0101-10, 193-0101-25  
Synonyms: None  
Chemical Family: Inorganic Salt (sodium chlorite).  
CAS #: 7758-19-2  
Molecular Formula:  $\text{NaClO}_2$

### Section 2 - Ingredients

Chemical	CAS#	%	PEL	TLV
Sodium chlorite	7758-19-2	100	Not established	Not established

### Section 3 - Physical Data

Boiling Point: Decomposes at 175°C  
% Volatiles: N/A  
Solubility in Water: 39 grams per 100cc cold water  
Specific Gravity ( $\text{H}_2\text{O} = 1$ ): N/A  
Freezing / Melting Point: N/A  
Evaporation Rate  
(butyl acetate = 1): N/A  
Vapor Density (air = 1): N/A  
Vapor Pressure: N/A  
Appearance and Odor: White crystalline powder  
Other: No data



# Advanced Calibration Designs

## Chlorine Dioxide Electrolyte (Powder)

### Section 4 - Fire and Explosion Hazard Data

Flash Point (°F): N/A  
Flammable Limits in Air, % by volume: Lower: N/A Upper: N/A  
Autoignition Temperature: N/A  
Extinguishing Media: Extinguishing agent appropriate to surrounding fire  
Special Fire Fighting Procedures: N/A

### Section 5 - Health Data

OSHA (PEL): NaClO<sub>2</sub> Not Established

ACGIH (TLV): NaClO<sub>2</sub> Not Established

#### ANIMAL TOXICITY

LD50:  
Oral - mouse NaClO<sub>2</sub> 350 mg/kg.  
Oral - rat NaClO<sub>2</sub> 165 mg/kg.

LC50: No data

#### EFFECTS OF EXPOSURE

##### Acute Effects

Ingestion: May cause gastrointestinal irritation. Will act as a laxative. Acute exposure may cause fluid loss, purging, blood in stools, a fall in blood pressure and hypernatremia.  
Skin Contact: May cause irritation or burns.  
Eye Contact: May cause irritation or burns.  
Inhalation: May cause irritation or burns.  
Medical Conditions, if any, aggravated by the chemical: None known.  
Other health hazards: Solutions are corrosive.  
Most likely routes of entry: Ingestion

##### Chronic Effects

Ingestion: None known.  
Skin Contact: None known.  
Eye Contact: None known.  
Inhalation: None known.  
Other: Sodium chlorite has caused teratogenic, mutagenic and reproductive effects in experimental animals.



# Advanced Calibration Designs

## Chlorine Dioxide Electrolyte (Powder)

### Section 5 - Health Data (continued)

#### EMERGENCY AND FIRST AID PROCEDURES

Ingestion:	If conscious, give two glasses of water. Induce vomiting by placing finger to back of throat. Keep head below hips to prevent aspiration. Get medical attention.
Skin Contact:	Remove contaminated clothing, flood skin with large amounts of water. If irritation persists seek medical attention.
Eye Contact:	Immediately flush eyes, including under eyelids, with large amounts of water for at least 15 minutes. Call a physician.
Inhalation:	No specific information available, remove individual to fresh air, seek medical attention.

### Section 6 - Reactivity

Incompatibility:	Avoid contact with strong acids, reducing agents, and organic matter.
Hazardous Decomposition Products:	Chlorine, sodium oxide. May form explosive chlorine dioxide gas on contact with acids.
Conditions to Avoid:	Incompatibles
Stability:	Stable. Sodium chlorite decomposes at 175°C with evolution of heat.
Hazardous Polymerization:	Will not occur.
Other:	No data

### Section 7 - Environmental Information

RCRA Code:	NaClO <sub>2</sub> - D002
TSCA Registered:	Yes
Spill and Leak Procedures:	Sweep or scoop up and place in clean container.
Waste Disposal:	Consult State, Local, or Federal EPA regulations for proper disposal.

### Section 8 - Protection Information

Ventilation Requirement:	Laboratory fume hood.
Respiratory Protection:	NIOSH/MSHA approved dust mask for ordinary use of dry salts, self-contained breathing apparatus for emergency use.
Protective Gloves:	Neoprene
Eye/Face Protection:	ANSI approved safety goggles.



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### Section 9 - Special Precautions

Handling and Storage: Keep container tightly closed. Store in a cool, dry well ventilated area.  
Other Precautions: Lab coat and apron, flame and chemical resistant coveralls, eyewash capable of sustained flushing, safety drench shower, and hygienic facilities for washing.

### Section 10 - Transportation Information - U.S. Department of Transportation

Per 49CFR: 172.101 with exception 173.4.  
Proper Shipping Name: Sodium chlorite.  
Hazardous Class: 5.1, Oxidizer  
Packaging Group: II  
UN#: Sodium chlorite - 1496

### Section 11 - Comments

This data is offered in good faith as typical values and not as a product specification. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.