

## SAFETY DATA SHEET

Creation Date 02-May-2012

Revision Date 17-Jun-2025

Revision Number 8

### 1. Identification

**Product Name** Sodium chlorite, unstabilized

**Cat No. :** AC223230000; AC223230025; AC223230050; AC223230100;  
AC223235000

**CAS No** 7758-19-2  
**Synonyms** Alicide LD; Chlorous Acid, Sodium Salt (8Cl, 9Cl)

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use.

#### Details of the supplier of the safety data sheet

##### Company

Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

##### **Emergency Telephone Number**

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Oxidizing solids	Category 1
Acute oral toxicity	Category 3
Acute dermal toxicity	Category 2
Skin Corrosion/Irritation	Category 1 B
Serious Eye Damage/Eye Irritation	Category 1
Specific target organ toxicity - (repeated exposure)	Category 2
Target Organs - spleen.	

#### Label Elements

##### **Signal Word**

Danger

**Hazard Statements**

May cause fire or explosion; strong oxidizer

Toxic if swallowed

Fatal in contact with skin

Causes severe skin burns and eye damage

May cause damage to organs through prolonged or repeated exposure

**Precautionary Statements****Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not get in eyes, on skin, or on clothing

Wear protective gloves/protective clothing/eye protection/face protection

Do not breathe dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep/Store away from clothing/ other combustible materials

Take any precaution to avoid mixing with combustibles

Wear fire/flammable resistant/retardant clothing

Wear respiratory protection

**Response**

Immediately call a POISON CENTER or doctor/physician

**Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a POISON CENTER or doctor/physician

**Skin**

IF ON SKIN: Gently wash with plenty of soap and water

Wash contaminated clothing before reuse

IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes

Rinse skin with water/shower

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

**Ingestion**

Rinse mouth

Do NOT induce vomiting

**Fire**

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Very toxic to aquatic life with long lasting effects

Contact with acids liberates very toxic gas

Corrosive to the respiratory tract

### 3. Composition/information on Ingredients

Component	CAS No	Weight %
Sodium chlorite	7758-19-2	79 - 81
Sodium carbonate	497-19-8	5 - 8

### 4. First-aid measures

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
<b>Ingestion</b>	Do NOT induce vomiting. Call a physician or poison control center immediately.
<b>Most important symptoms and effects</b>	Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation
<b>Notes to Physician</b>	Treat symptomatically

### 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	Carbon dioxide (CO <sub>2</sub> ). Foam. Dry chemical. Chemical foam.
<b>Unsuitable Extinguishing Media</b>	No information available
<b>Flash Point</b>	No information available
<b>Method -</b>	No information available
<b>Autoignition Temperature</b>	Not applicable
<b>Explosion Limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	7%
<b>Oxidizing Properties</b>	Oxidizer
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available

#### Specific Hazards Arising from the Chemical

Burning produces obnoxious and toxic fumes. Containers may explode when heated. Oxidizer: Contact with combustible/organic material may cause fire. May ignite combustibles (wood, paper, oil, clothing, etc.). Do not allow run-off from fire-fighting to enter drains or water courses.

#### Hazardous Combustion Products

Sodium oxides. Hydrogen chloride gas.

#### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### NFPA

Health  
4Flammability  
0Instability  
2Physical hazards  
OX

## 6. Accidental release measures

### Personal Precautions

Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas.

### Environmental Precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

### Methods for Containment and Clean Up

Wear self-contained breathing apparatus and protective suit. Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment. Avoid dust formation. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Sweep up and shovel into suitable containers for disposal.

## 7. Handling and Storage

### Handling

Use only under a chemical fume hood. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Do not ingest. If swallowed then seek immediate medical assistance. Minimize dust generation and accumulation. Wash hands before breaks and immediately after handling the product. Keep away from clothing and other combustible materials.

### Storage.

Do not store near combustible materials. Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area. Incompatible Materials. Organic materials. Finely powdered metals. Strong reducing agents. Combustible material.

## 8. Exposure controls / personal protection

### Exposure Guidelines

#### Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal Protective Equipment

#### Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

#### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

#### Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

#### Recommended Filter type:

Particulates filter conforming to EN 143.

#### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

### Physical State Appearance

Powder Solid  
White

Odor	Odorless
Odor Threshold	No information available
pH	No information available
Melting Point/Range	180 - 200 °C / 356 - 392 °F
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	7%
Vapor Pressure	No information available
Vapor Density	Not applicable
Specific Gravity	No information available
Solubility	Soluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	Not applicable
Decomposition Temperature	180 °C
Viscosity	Not applicable
Molecular Formula	Cl Na O <sub>2</sub>
Molecular Weight	90.44

## 10. Stability and reactivity

Reactive Hazard	Yes
Stability	Oxidizer: Contact with combustible/organic material may cause fire.
Conditions to Avoid	Incompatible products. Exposure to moist air or water. Excess heat. Combustible material.
Incompatible Materials	Organic materials, Finely powdered metals, Strong reducing agents, Combustible material
Hazardous Decomposition Products	Sodium oxides, Hydrogen chloride gas
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

## 11. Toxicological information

### Acute Toxicity

#### Product Information

Oral LD50	Category 3. ATE = 50 - 300 mg/kg.
Dermal LD50	Category 2. ATE = 50 - 200 mg/kg.
Mist LC50	Based on ATE data, the classification criteria are not met. ATE > 5 mg/l.

#### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium chlorite	LD50 = 284 mg/kg ( Rat )	LD50 = 134 mg/kg ( Rabbit )	LC50 = 230 mg/m <sup>3</sup> ( Rat ) 4 h
Sodium carbonate	2800 mg/kg ( Rat )	> 2000 mg/kg (rabbit)	2.3 mg/l 2h (Rat)

Toxicologically Synergistic Products	No information available
--------------------------------------	--------------------------

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation	Causes burns by all exposure routes
Sensitization	No information available
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Sodium chlorite	7758-19-2	Not listed	Not listed	Not listed	Not listed	Not listed
Sodium carbonate	497-19-8	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known  
**STOT - repeated exposure** spleen

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Sodium chlorite	Not listed	LC50: > 100 mg/L, 96h static (Oncorhynchus mykiss) LC50: > 100 mg/L, 96h static (Lepomis macrochirus) LC50: 100 - 500 mg/L, 96h static (Brachydanio rerio)	Not listed	EC50: 0.012 - 0.018 mg/L, 48h Static (Daphnia magna) EC50: = 0.026 mg/L, 48h (Daphnia magna) EC50: 0.25 - 0.33 mg/L, 48h Flow through (Daphnia magna)
Sodium carbonate	Not listed	Lepomis macrochirus: LC50: 300 mg/L/96h Gambusia affinis: LC50: 740 mg/L/96h	-	EC50: = 265 mg/L, 48h (Daphnia magna)

**Persistence and Degradability** Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

Component	log Pow
Sodium chlorite	-2.7

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

### DOT

**UN-No** UN1496  
**Proper Shipping Name** SODIUM CHLORITE

<b>Hazard Class</b>	5.1
<b>Packing Group</b>	II
<b>TDG</b>	
<b>UN-No</b>	UN1496
<b>Proper Shipping Name</b>	SODIUM CHLORITE
<b>Hazard Class</b>	5.1
<b>Packing Group</b>	II
<b>IATA</b>	
<b>UN-No</b>	UN1496
<b>Proper Shipping Name</b>	SODIUM CHLORITE
<b>Hazard Class</b>	5.1
<b>Packing Group</b>	II
<b>IMDG/IMO</b>	
<b>UN-No</b>	UN1496
<b>Proper Shipping Name</b>	SODIUM CHLORITE
<b>Hazard Class</b>	5.1
<b>Packing Group</b>	II

## 15. Regulatory Information

### United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Sodium chlorite	7758-19-2	X	ACTIVE	-
Sodium carbonate	497-19-8	X	ACTIVE	-

#### Legend:

**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

- - Not Listed

#### TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

#### TSCA 12(b) - Notices of Export

Not applicable

### International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Sodium chlorite	7758-19-2	X	-	231-836-6	X	X	X	X	X	KE-31388
Sodium carbonate	497-19-8	X	-	207-838-8	X	X	X	X	X	KE-31380

**KECL** - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

### U.S. Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

#### CWA (Clean Water Act)

#### Clean Air Act

Not applicable

**OSHA** - Occupational Safety and Health Administration Not applicable

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

**California Proposition 65** This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sodium chlorite	X	X	X	-	X

**U.S. Department of Transportation**

Reportable Quantity (RQ): Y  
DOT Marine Pollutant N  
DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security**

This product contains the following DHS chemicals:  
**Legend** - STQs = Screening Threshold Quantities, APA = A placarded amount

**Other International Regulations**

**Mexico - Grade** No information available

**Authorisation/Restrictions according to EU REACH**

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Sodium chlorite	7758-19-2	-	-	-
Sodium carbonate	497-19-8	-	Use restricted. See entry 75. (see link for restriction details)	-

**REACH links**

<https://echa.europa.eu/substances-restricted-under-reach>

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Sodium chlorite	7758-19-2	Listed	Not applicable	Not applicable	Not applicable
Sodium carbonate	497-19-8	Listed	Not applicable	Not applicable	Not applicable

**Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?**

Not applicable



## Other International Regulations

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Sodium chlorite	7758-19-2	Not applicable	Not applicable	Not applicable	Not applicable
Sodium carbonate	497-19-8	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other Information

## Prepared By

Regulatory Affairs  
Thermo Fisher Scientific  
Email: EMSDS.RA@thermofisher.com

## Creation Date

02-May-2012

## Revision Date

17-Jun-2025

## Print Date

17-Jun-2025

## Revision Summary

This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

## Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**