

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name Sodium Hypochlorite 12% Solution  
CAS number 7681-52-9  
Synonyms Antiformin

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Laboratory chemicals

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

Company Lab Alley, LLC  
12501 Pauls Valley Road  
Austin, Texas 78737  
U.S.A.  
Telephone 512-668-9918  
Fax 512-886-4008

#### 1.4 Emergency telephone

Emergency Phone # US & Canada: 1-800-535-5053 INFOTRAC  
International 1-352-323-3500 INFOTRAC

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Corrosive to metals (Category 1)  
Skin corrosion/irritation (Category 1)  
Serious eye damage/irritation (Category 1)  
Specific target organ toxicity (Single exposure) (Category 3)  
Target organs - Respiratory system

#### 2.2 GHS Label elements, including precautionary statements

**Pictogram****Signal Word**

Danger

**Hazard statements**

May be corrosive to metals  
 Causes severe skin burns and eye damage  
 May cause respiratory irritation

**Precautionary statements**

**Prevention** Do not breathe dust/fume/gas/mist/vapors/spray  
 Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Use only outdoors or in a well-ventilated area  
 Keep only in original container

**Response** Immediately call a POISON CENTER or physician  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Skin** IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse

**Ingestion** IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.

**Spills** Absorb spillage to prevent material damage.

**Storage** Store locked up  
 Store in a well-ventilated place. Keep container tightly closed  
 Store in a corrosive resistant polypropylene container with a resistant inliner  
 Store in a dry place.

**Disposal** Dispose of contents/container to an approved waste disposal plant.

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS**

Very toxic to aquatic life. Toxic to aquatic life with long lasting effects. Contact with acids liberates toxic gas.

**SECTION 3: Composition/information on ingredients****3.1 Components**

Chemical name	Common name and synonyms	CAS number	Concentration
Water	-	7732-18-5	85-87.5%
Sodium hypochlorite	Antiformin	7681-52-9	12.5-15%

**SECTION 4: First aid measures****4.1 Description of first-aid measures****General advice**

<b>If inhaled</b>	If not breathing, give artificial respiration. Remove from exposure, lie down. 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. Call a physician immediately.
<b>In case of skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Call a physician immediately.
<b>In case of eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
<b>If swallowed</b>	Do NOT induce vomiting. Clean mouth with water. Never give anything by mouth to an unconscious person. Call a physician immediately.

#### 4.2 Most important symptoms and effects, both acute and delayed

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.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

**Suitable extinguishing media** CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

**Unsuitable extinguishing media** No information available

#### 5.2 Specific hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes. Do not allow run-off from fire-fighting to enter drains or water courses. Hazardous combustion products: Chlorine. Oxygen.

#### 5.3 Special 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. Thermal decomposition can lead to release of irritating gases and vapors.

#### 5.4 Further information

**Flash Point** No information available

**Autoignition Temperature** No information available

**Explosion limits**

**Upper** No information available

**Lower** No information available

**Sensitivity to Mechanical Impact** No information available

**Sensitivity to Static Discharge** No information available

**NFPA**

Health	Flammability	Instability	Physical hazards
3	0	1	N/A

**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**6.2 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.

**6.3 Methods and materials for containment and cleaning up**

Soak up with inert adsorbent material. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

See section 2 for full list of hazard and precaution statements.

**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

**Precautions on safe handling**

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.

**Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage conditions**

Keep container tightly closed in a dry and well-ventilated place. Do not store in metal containers. Protect from direct sunlight. Keep refrigerated.

**Incompatibilities**

Acids, strong oxidizing agents, metals, amines.

## SECTION 8: Exposure controls/personal protection

### 8.1 Occupational exposure limits

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### 8.2 Exposure controls

#### Appropriate engineering controls

Use only under a chemical fume hood. 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. Tightly fitting safety goggles. Face-shield.

##### Skin protection

Long sleeved clothing.

##### Body Protection

Long sleeved clothing.

##### Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

##### Control of environmental exposure

No information available

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Yellow
Odor	Pungent chlorine
Odor Threshold	No information available
pH	11-13 pH
Melting Point/Range	-16 °C / 3.2 °F
Boiling Point/Range	No information available

Evaporation Rate	No information available
Flammability (solid)	Not applicable
Flammability or explosive limit	No information available
Upper	No information available
Lower	No information available
Vapor Pressure	No information available
Vapor Density	No information available
Density	1.2-1.3
Solubility	Soluble in water
Partition coefficient; n-octanol/water	No information available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	CINaO
Molecular Weight	74.44
VOC Content(%)	No information available
Oxidizing properties	No information available

## 9.2 Other safety information

No information available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Yes

### 10.2 Chemical stability

Stable under normal conditions. Sensitivity to light.

### 10.3 Possibility of hazardous reactions

None under normal processing.

### 10.4 Conditions to avoid

Incompatible products. Excess heat.

### 10.5 Incompatible materials

Acids, strong oxidizing agents, metals, amines.

### 10.6 Hazardous decomposition products

Chlorine, oxygen.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

#### Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
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Sodium hypochlorite	8.91 g/kg	>2000 mg/kg	10500 mg/l, 1h
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**Skin corrosion/irritation**

Causes burns by all exposure routes.

**Serious eye damage/eye irritation**

Causes burns by all exposure routes.

**Respiratory or skin sensitization**

No information available

**Germ cell mutagenicity**

No information available

**Carcinogenicity**

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Sodium hypochlorite	76-52-9	Not listed	Not listed	Not listed	Not listed	Not listed
Water	7681-52-9	Not listed	Not listed	Not listed	Not listed	Not listed

**Specific target organ toxicity - single exposure**

Respiratory system

**Specific target organ toxicity - repeated exposure**

None known

**Reproductive toxicity**

No information available

**Chronic effects**

No information available

**11.2 Additional Information**

Not applicable

**SECTION 12: Ecological information**

**12.1 Toxicity**

Product		Species	Test Results
Sodium hypochlorite	EC50	Freshwater algae	0.05 mg/L, 72h
	LC50	Freshwater fish	0.065 mg/L, 96h
	LC50	Water flea	0.032 mg/L, 48h

**12.2 Persistence and degradability**

Soluble in water. Persistence is unlikely based on information available.

Miscible with water.

### 12.3 Bio accumulative potential

No information available

### 12.4 Mobility in soil

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

### 12.5 Results of PBT and vPvB assessment

No information available

### 12.6 Endocrine disrupting properties

No information available

### 12.7 Other adverse effects

No information available

## SECTION 13: Disposal considerations

### 13.1 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.

## SECTION 14: Transport information

### DOT (US)

UN-no.	UN1791
Proper shipping name	HYPOCHLORITE SOLUTIONS
Hazard class	8
Packing group	III

### IMDG

UN-no.	UN1791
Proper shipping name	HYPOCHLORITE SOLUTIONS
Hazard class	8
Packing group	III

### IATA

UN-no.	UN1791
Proper shipping name	HYPOCHLORITE SOLUTIONS
Hazard class	8
Packing group	III

## SECTION 15: Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.



**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not applicable

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Sodium hypochlorite: hazardous substances RQ: 100lb

**SARA 304 Emergency release notification**

Not regulated

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous**

See section 2 for more information

**SARA 313 (TRI reporting)**

Not regulated

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act**

Sodium hypochlorite RQ: 100 lb

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Not listed

**US state regulations**

**US. Massachusetts RTK - Substance List**

Listed

**US. New Jersey Worker and Community Right-to-Know Act**

Listed

**US. Pennsylvania Worker and Community Right-to-Know Law**

Listed

**California Proposition 65**

Not listed

**SECTION 16: Other information**

Issue date: 04/30/2010  
Revision 1: 12/05/2023  
Revision 2: 07/05/2024

## **SECTION 17: Disclaimer**

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.