

# Material Safety Data Sheet

## Sodium Hypochlorite

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### 1. Product and company

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#### \* Product identification

Product name: Sodium hypochlorite solution

#### \* Identification of the manufacturer / distributor

THE TUNISIAN-ALGERIAN CHLORINE.SA

HEAD OFFICE: 08 RUE DES JASMINES CITE BEL AIR BOUMHAL 2097 BEN AROUS

FACTORY: ZI Djebel el Ouest ZAGHOUE TUNIS

Tel: 00 216 72 640 350/00 216 22 76 54 72

FAX: 00 216 72 640 305

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### 2. Composition / information about the components

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#### 2.1. Chemical nature: Aqueous solution

Synonyms: Bleach 13% available chlorine (50 ° Chl)

CAS Number: 7681-52-9

Molecular formula: **NaOCl**

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### 3. Hazards Identification

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#### 3.1. Classification of the mixture:

Corrosive (C)

Irritant (Xi)

Dangerous for the environment (N)

#### 3.2. Labeling of the substance or mixture:



Xi - Irritant



Corrosif



N - Dangereux pour  
l'environnement

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### Hazard statement

- Irritating to eyes and skin.
- Very toxic to aquatic organisms.
- Contact with acids liberates toxic gas (chlorine).

### Tips caution-Prevention

- Keep out of reach of children.
- Avoid release to the environment.

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### 4. First aid

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#### 4.1. Description of necessary first aid

In case of inhalation:	Fresh air. See a doctor.
In case of skin contact:	Wash thoroughly with water. Immediately remove all contaminated clothing.
In case of contact with eyes: eyelids	Flush with water for at least 10 minutes, holding the apart. Consult an ophthalmologist.
If swallowed:	Drink lemon juice, vinegar or raw eggs mixed with milk and lots of water, do not induce vomiting.

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

After inhalation:	Severe irritation of the respiratory system Irritates mucous membranes. Symptoms: Difficulty breathing, cough, Chemical pneumonia and pulmonary edema. Repeated or prolonged exposure: Bleeding from the nose, chronic bronchitis.
In case of skin contact:	Severe skin irritation. Symptoms: Redness, swelling of tissue, burns. Repeated exposure: Ulceration.
In case of contact with eyes:	May cause irreversible eye damage. Symptoms: Redness, swelling of tissue, burns.

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If swallowed:

Burns severe mouth and throat, as well as perforation of the esophagus perforation of the esophagus and the stomach.  
Risk of chemical pneumonia from product aspiration in the respiratory tract.

Symptoms: Nausea, abdominal pain with blood vomiting, suffocation diarrhea, cough, failure severe respiratory.

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### 5. Measures to fight against fire

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#### 5.1. Extinguishing Media

- Means of extinction suitable: Water
- Specific hazards: No
- Other information: Non-combustible.

#### 5.2. Special hazards arising from the substance or mixture

- Formation of dangerous products during decomposition.
- Promotes combustion products or combustible materials.

#### 5.3. Advice for firefighters

- Wear self-contained breathing apparatus.
- Use personal protective equipment.
- Wear chemical resistant outerwear.
- Cool containers / tanks with water spray.
- Suppress gases vapors mists with water spray.
- Collect contaminated extinguishing water, do not discharge into drains.

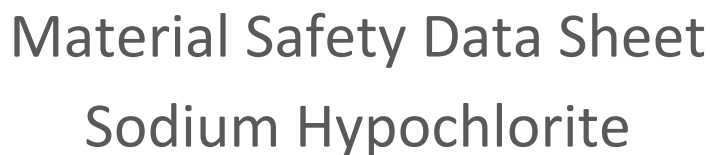
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### 6. Measures in case of accidental release

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#### 6.1. Personal precautions, protective equipment and emergency procedures

- Avoid spillage or further leakage if possible.
- Keep away from incompatible products.
- Isolate area and evacuate personnel to a safe place.
- Keep people away from the place of the flow of the leak and against the wind.
- Use personal protective equipment.
- In case of significant emissions, use breathing apparatus in confined place if oxygen is insufficient.
- Avoid contact with skin and eyes.



- Do not release into the environment.
- Do not flush into surface water or sanitary sewer system.
- In case of pollution during and lakes or drains, inform appropriate authorities in accordance with local regulations.

- Dam.
- Remove with inert absorbent.
- Contain in properly labeled containers. The containers are suitable and closed for disposal.
- Dispose of according to regulations.
- Treat recovered according to section 13.

- Keep container tightly closed.
- Use in well ventilated areas.
- When diluting, always add product to water. Never add water to the product.
- Keep away from incompatible products.
- Do not overheat to avoid thermal decomposition.
- Avoid contact with skin and eyes.
- Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke in the work area.
- Wash hands after handling.

Storage: Keep tightly closed in a cool, ventilate original packaging.

Store away from light. Store in a holding tank.

Keep away from incompatible products (liquids flammable, combustible ...).

Do not freeze.

Packing material: Suitable material Polyesters laminates, coated steel, PVC, polyethylene, glass.  
Unsuitable materials: metals.

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For prolonged storage there is a risk of gas formation. Closing containers so as to allow the inner pressure to escape (eg overpressure valve).

### 8. Exposure controls / personal protection

#### 8.1. Control parameter

Exposure Limits: Not established

#### 8.2- Exposure Control

Engineering measures: See protective measures Section 7

#### Individual protection equipment

Respiratory protection: In case of insufficient ventilation and / or when workers face high concentrations they must use appropriate certified respirators.

Hand protection: Wear gloves of PVC or neoprene or rubber natural.  
Consider the information provided by the supplier of gloves concerning permeability and break through times.

Eye protection: Tightly fitting safety goggles.

Skin protection: Wear suitable protective clothing.

Hygiene measures: Ensure that eyewash stations and safety showers are close to the station sites working.

### 9. Physical and Chemical Properties

Appearance:	liquid
Colour:	yellowish green
Odour:	characteristic
pH at 20 ° C:	approximately 11.5 - 12.5
Melting temperature:	not applicable
Boiling point:	not applicable
Auto-ignition:	not applicable
Flash point:	not applicable

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Explosive limits in air

Lower: not applicable

Upper:

Density:

about 1.21 - 1.23 g / cm<sup>3</sup>

Solubility in water at 20 ° C

dissolvable

Surface tension

82.4 mN / m (20 ° C)  
(chlorine: 24.3%)

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### 10. Stability and reactivity

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#### 10.1. Reactivity

- No information available.

#### 10.2- Chemical Stability

- No decomposition if stored and applied as directed (section 7)
- Corrosive in contact with metals

#### 10.3. Dangerous reactions

- No information available

#### 10.4. Conditions to avoid

- Heat, direct sunlight and frost.

#### 10.5. Incompatible materials

- Metals, metal salts, acids, organic materials, oil, grease, ammonia.
- Do not get in (not even close) of trichloroisocyanuric acid or sodium dichloroisocyanurate (organic chlorine).

#### 10.6- Hazardous decomposition products

- Chlorine, sodium chlorate, toxic gas.
- Hypochlorous acid predominates at pH is 4 to 5 times more toxic than hypochlorite ion.
- The release of other decomposition products risk is possible.

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### 11. Toxicological information

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#### \* Acute toxicity:

We do not have quantitative data on the toxicity.

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### \* Further toxicological information

After inhalation: mucosal irritations, coughing, and dyspnea. In

Contact with skin causes burns.

In case of eye contact: Causes burns. Danger of blindness!

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### 12. Ecological Information

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Do not allow to into natural waters, waste water, or soil!

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### 13. Considerations Disposal

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### \* Product:

There are still no uniform regulations for disposal chemicals products and their residues. Chemicals and their residues should be considered as a special waste. Their elimination is regulated. We recommend taking contact with competent authorities (administration and companies specialized in waste disposal) that will inform you of the measures for the disposal.

### \* Packaging:

Dispose according to official regulations. The contaminated containers must be treated identically to the product contained therein.

Unless specifically regulated, non-contaminated packaging may be treated as household waste or recycled.

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### 14. Transport Information

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### \* Truck transport

International designation of the material:  
1791 - SODIUM HYPOCHLORITE SOLUTION

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### 15. Regulations

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### \* Labelling

Symbol (s): C

Type of hazard (s): Corrosive



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### Sentences

Contact with acids liberates toxic gas.  
Causes burns.  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
After contact with skin, wash immediately with plenty of the water. Wear protective appropriate clothing, gloves and an eye protection / face protection.  
In case of accident or illness consult a doctor immediately (if possible show the label).

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### 16. Other information

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The information contained herein is based on our present knowledge of the product concerned. They are given in good faith. This listing does not represent a guarantee of the properties of the product. It does not exempt the user to comply with all the regulations governing his activity.