



# Technical Data Sheet

## EverChlor 11-14%

<b>Chemical Formula</b>	: NaOCl
<b>EC No.</b>	: 231-668-3
<b>CAS No.</b>	: 7681-52-9

### General Information:

EverChlor 12,5-15% is a commodity chemical used for a wide range of applications. Its wide spectrum of use ranges from disinfection processes to oxidation reactions and applications in the synthesis of organic compounds. It consists of sodium hypochlorite dissolved in water and is characterized by its strong oxidizing properties and its chemical formula NaOCl. As a strong oxidizing agent, sodium hypochlorite can promote the oxidation of substances when used, resulting in changes in their chemical structures.

In addition, it can be used as a bleaching agent in certain laboratory protocols. It also has applications in microbiology, where it is used to disinfect surfaces and inactivate microorganisms. Despite its strength, the solution remains manageable and can be used safely in a laboratory environment.

### Technical Quality Conditions:

Characteristics	Values	Test methods
Active Chlorine content	%11– 14 (m/v)	Titrimetric
Total Chlorine content	Active Chlorine max %10 more	Titrimetric
NaOH content	%0,7 – 1,1 (m/v)	Titrimetric
Na <sub>2</sub> CO <sub>3</sub> content	max. %0,4 (m/v)	Titrimetric
Sediment	N / A	Visual
Stability (24-hour, 35°C)	max. 7g. Chlorine/L	Titrimetric
Iron (Fe) content	max. 0,2 ppm	Colorimetric
Density (20°C)	1,210 gr/cm <sup>3</sup>	ASTM D4052

### Physical and chemical properties:

**Appearance and Smell:** Light, greenish yellow colored liquid, has a characteristic smell  
 Conditions causing decomposition: Sodium Hypochlorite solutions can easily decompose. Stability can be provided by sodium hydroxide excess. Although excess sodium hydroxide, all Sodium Hypochlorite decompose slowly by time. The amount of Oxygen gas coming up is a result of stability. The decomposing conditions and decomposing speed are related to lots of parameters. But the most



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important ones are given below.

- ✓ Hypochlorite concentration
- ✓ Temperature
- ✓ Light
- ✓ Light
- ✓ Metal impurities in material

High concentrated hypochlorite solutions decomposes faster than low concentrated hypochlorite solutions.

Temperature and light fasten the decomposition.

The impurities such as copper, nickel, cobalt, iron metals cause decomposition by excreting oxygen.

## Application fields:

- ✓ Liquid bleach production
- ✓ Textile Industry (bleaching process)
- ✓ Disinfection and cleaning processes
- ✓ Potable and waste water refining
- ✓ Chlorination of water
- ✓ Paper Industry

## Packaging:

Delivered in polyethylene and rubber coated steel tankers in bulk form.

## Storage:

- Due to corrosive effect of sodium hypochlorite on metals, tanks manufactured from PVC, high-density polyethylene or appropriate rubber coated carbon steel may be used for storage.
- Sodium hypochlorite solutions decompose easily under presence of HEAT, LIGHT, IMPURITIES and HEAVY METAL cations. Therefore, these issues should be considered when preparing storage conditions, storage temperature should not be over 30 °C, product should not be subjected to direct sunlight and ingress of impurities should be prevented.
- Its reaction with acids will yield suffocating chloride gas, therefore this issue should be especially considered in storage.
- Personal protective equipment should be used for all kinds of process

## Security precautions:

Glasses, face mask, glove, rubber boot and protective clothes should be worn. Sodium Hypochlorite is effective against human tissue, so if contacted with skin, it causes skin burns. In this case flush the contaminated area with lukewarm and remove all contaminated clothing. If flush, pain or blister occurs, seek medical advice. In contact with eye, immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 15 minutes, holding the eyelid(s) open. Seek medical



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advice. If Sodium Hypochlorite is contacted by mouth, wash it with plenty of water and make the patient drink water. Do not induce vomiting and obtain medical attention immediately. If it is inhaled, remove patient to fresh air. Check for breathing and pulse. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Immediately seek medical advice. If sodium hypochlorite contacts with acid, a toxic chlorine gas exists. In such cases;

- ❖ Restrict access to area
- ❖ Move away taking the wind at backside
- ❖ Do not enter this contaminated area if not necessary. If necessary, wear a protective clothing with an oxygen tube

If effected by chlorine gas,

- Take off the clothing immediately
- Take the patient to open air and keep him comfortable and warm. Boil a bowl of water and make him to inspire the vapor
- If the patient hardly breathing or not breathing, make artificial respiration.

#### Important:

For a better suitability of the product for your particular purpose, tests are recommended prior product use. You are advised to make your own determination as to safety, appropriate manner of handling, storage, use and disposal. All the information contained in this product technical sheet is offered for your consideration, investigation and verification. The data is presented in good faith and is believed to be reliable. You should not consider the descriptions, information, data or design as a part of our terms and conditions of sale. We expressly disclaim responsibility or liability for any loss, damage or expense arising out of reliance on the information provided herein.