

## TYPE-1 SODIUM HYPOCHLORITE - SOLUTION (NaOCl)

### PRODUCT SPECIFICATIONS

Parameters	Results	Analysis Methode
Active Chlorine content	% 15 – 16 (m/v)	Titrimetric
NaOH content	% 0,3 – 1,1 (m/v)	Titrimetric
Na <sub>2</sub> CO <sub>3</sub> max.	% 0,4 (m/v) max.	Titrimetric
Insoluble materials	Absent	Physical control
Stability (24 h, 35°C)	max. 7g. Klor/l	Titrimetric
Ferrum (Fe)	max. 0,2 ppm	Colorimetric
Density (20°C)	1,20 – 1,23 gr/cm <sup>3</sup>	Hydrometer

HEAVY METAL ANALYSIS	Result (max ) ppm	Analysis method
<b>Pb</b>	0,003	ICP
<b>Hg</b>	0,0002	ICP
<b>Fe</b>	0,002	ICP
<b>Ni</b>	0,0035	ICP
<b>Sr</b>	Absent	ICP
<b>Al</b>	Absent	ICP
<b>Mn</b>	Absent	ICP
<b>Ba</b>	Absent	ICP
<b>Cu</b>	Absent	ICP
<b>Li</b>	Absent	ICP
<b>Co</b>	Absent	ICP

### PHYSICAL AND CHEMICAL PROPERTIES

**Appearance and Odor:** Clear, yellowish colored liquid, has a characteristic smel

**Stability :** Sodium hypochlorite solutions is degradable easily. To keep the stability , solution consists excess sodium hydroxide. To get long term stability :

- Keep the solution under low temperature conditions
- Keep away from the light.
- Keep away from the metalic contaminations
- Hypochlorite concentration

High concentrated hypochlorite solutions decomposes faster than low concentrated hypochlorite solutions. Temperature and light fastens the decomposition. The impurities such as copper, nickel, cobalt, iron metals causes 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 clothings. 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 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 advise.

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 clothings immediately Take the patient to open air and keep him comfortable and warm.

Boil a bowl of water and make him to inspire the vapour If the patient hardly breathing or not breathing, make artificial respiration