



GOSHU KOHSAN CO., LTD.
www.goshukohsan.com

NaOCl Activating Equipment Unit

"Fresh, Clean and Safety with Chlorine with High Germicidal Efficiency"

Introduction

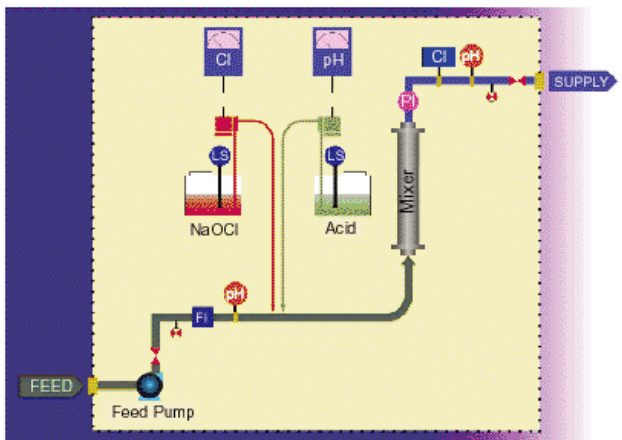
Activated Sodium Hypochlorite Solution is a chlorine solution that is activated by acid addition to increase the germicidal efficiency. It can be used as an alternative disinfectant, which is odorless and safe for the users. Either pure water or city water can be supplied for suitable dilution of solution to meet a variety of applications such as disinfection, sterilization and sanitary system in food processing industry, pharmaceutical industry and medical field, especially the customer who aims for ISO 14000 or HACCP.



Features

- Reduce amount of chemical dosage due to high germicidal efficiency
- Can use either pure water or city water for diluting solution
- Use acid with high stability and activating power for pH adjustment
- Generate rapidly homogeneous activated NaOCl solution by good mixing of static mixer
- On-line measurement of NaOCl concentration and pH
- Automatic shut-down of chemical feeding pump with level switch in chemical tank
- Safety due to few amount of chlorine gas occurrence
- Friendly to environment

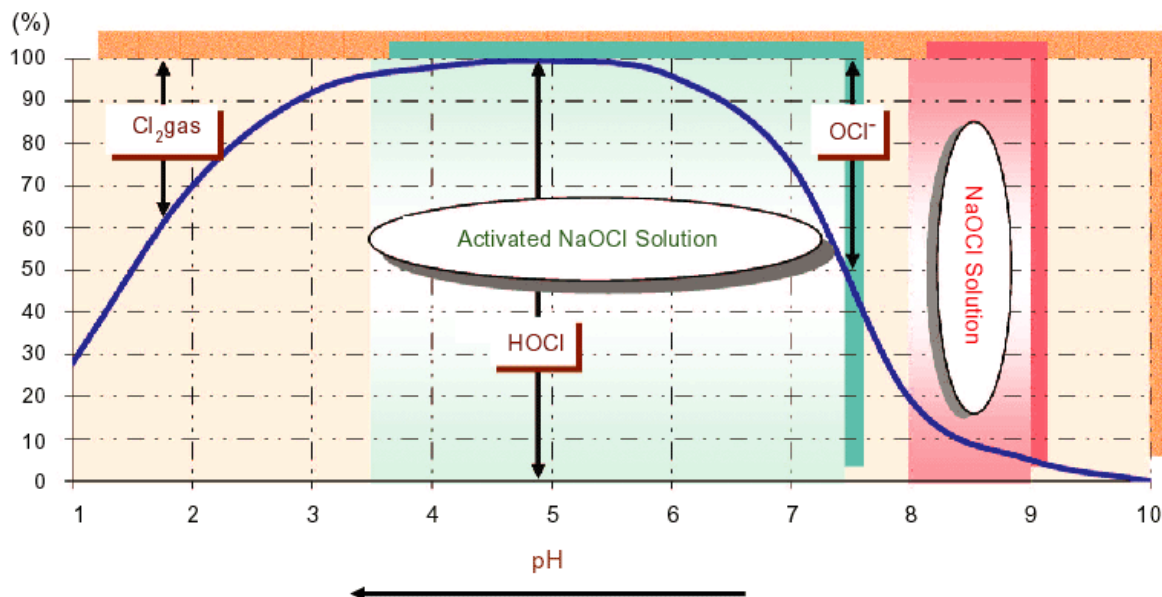
Flow Diagram



Applications

- Drinking water and recycled water treatment
- Slime control in cooling water treatment
- Pasteurizing and rinsing water for vegetables, fishes, and etc.
- Bottle cleaning system
- Disinfection and rinsing in hemodialysis

Dissociation of Residual Chlorine



Change of HOCl Presence by pH Adjustment with Acid

- ◆ By acetic acid addition, the fraction of undissociated HOCl increases with decreasing pH.
- ◆ The germicidal efficiency of free residual chlorine is directly related to the concentration of undissociated HOCl. Hypochlorous acid is 100 times more effective than the hypochlorite ion OCl^- .

Specification List of NaOCl Activating Equipment Unit

Model	CL-100	CL-200	CL-500
Water Supply for Dilution ¹⁾	Pure water ²⁾		
Supply Flow Rate (m ³ /Hr)	1		
Supply Pump	1 m ³ /Hr x 34 m ^H x 0.86 kW, 220 V		
NaOCl Dosage (g/Hr)	100	200	500
Dosing Pump ³⁾	1.2 L/Hr x 8 bar x 16 W	2.6 L/Hr x 5 bar x 16 W	6 L/Hr x 8 bar x 16 W
Operating Condition	Operating Pressure at 1.7-3.5 kg/cm ² , Temperature at 10-40 °C		
Unit Dimension (W x D x H)	550 x 750 x 1650	550 x 750 x 1650	550 x 750 x 1650
Product Weight (Kg)	80	85	85
Operating Weight (Kg)	125	150	150

- Remark
- 1) City water is also available to be supplied for another type; CLA type (CLA-100, CLA-200, CLA-500). The contact signal at 4-20 mA is applied to control automatically the acid addition.
 - 2) Pure water means the RO water or DI water with M-Alkalinity of less than 0.1 mg/L as CaCO₃.
 - 3) The capacity of dosing pump is subject to the concentrations of both sodium hypochlorite and acetic acid at 10%.

* Wide range of products besides above items are available.

* All designs and specifications will be subject to change with or without prior notice.