



**RX MARINE INTERNATIONAL**  
**Total Solution Total Protection**  
AN ISO CERTIFIED COMPANY



## Sodium Hypo Chlorite

<b>Part/Order no:</b>	<b>Packing</b>
RXSOL-31-3025-025	25 Ltr.
RXSOL-31-3025-210	210 Ltr.

### Sodium Hypo Chlorite:

A 12% solution is widely used in waterworks for the chlorination of water and a 15% solution is more commonly used for disinfection of waste water in treatment plants. High-test hypochlorite (HTH) is sold for chlorination of swimming pools and contains approximately 30% calcium hypochlorite. The crystalline salt is also sold for the same use; this salt usually contains less than 50% of calcium hypochlorite. However, the level of active chlorine may be much higher.

### Application:

- Also used as a disinfectant and germicide, especially in the sterilization of water.
- It is also used for making wool unshrinkable and in the manufacture of chloroform.
- For the purpose of disinfection and bleaching, a weak soln. ( 1.2 % ) is used. For purifying water 0.02 to 0.2 % volumetric is sufficient Potable Water Treatment Aquatics and Pools.
- Odor Control/Corrosion Control.
- Food & Beverage Processing.
- Wastewater Treatment.
- Cooling Towers, Inland Power.
- Stations & Industry.
- Irrigation Systems.
- Agriculture/Farming.

### HANDLING AND STORAGE PRECAUTIONS:

Do not store adjacent to chemicals that may react if spillage occurs. Comply with Oman regulations, when shipped. If closed containers become heated, vent to release decomposition products (mainly oxygen under normal decomposition). Do not mix or contaminate with ammonia, hydrocarbons, acids, alcohol or ethers.

### DO NOT REUSE CONTAINERS:

Product residues may remain in containers. All labeled precautions MUST be observed. Dispose of container in a manner meeting government regulations.

### PRODUCT DISPOSAL:

Product should be completely removed from containers. Material that cannot be used or chemically reprocessed should be disposed of, in a manner meeting government regulations.

### Precaution:

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**SODIUM HYPOCHLORITE:**

**ACTIVE INGREDIENT:**

Sodium Hypochlorite as Chlorine : 15%

Sodium Hydroxide : 1%

INERT INGREDIENTS : 84%

Total : 100%

General formulation to calculate how much bleach is needed to add to a tank or a pipeline to disinfect it to a given chlorine residual using a given disinfectant. Usually someone wants to know how to meet an AWWA Standard (like C651-92, Disinfection of Water Mains). The equation below should be used to estimate the amount of sodium / Calcium hypochlorite (Chlorine Water is 6.00% sodium hypochlorite) needed to disinfect a given quantity of water to a desired chlorine concentration.

$$\text{Volume of hypo} = \text{volume of water} \times \left( \frac{\text{req'd residual in ppm}}{1,000,000 \times \text{hypo \%}} \right)$$

For example , say you had installed a new 5,000 gallon tank and wanted to make sure that you had at least a 100 ppm solution of chlorine in it.

How much 6.00% Hypochlorite would you need to add ?

●  $(5,000 \text{ gal} \times 100 \text{ ppm}) / (1,000,000 \times 06) = 8.33 \text{ gallons}$

How much 12% Hypochlorite solution would you need ?

●  $(5,000 \text{ gal} \times 100 \text{ ppm}) / (1,000,000 \times 12) = 4.17 \text{ gallons}$

If you use calcium hypochlorite (the White, powder version of chlorine, like HTH pool cleaner), the equation becomes:

$$\text{Wgt. of Calcium Hypo (lbs)} = \frac{\text{Gal of water} \times 8.33 \text{ lb / gal m} \times \left( \frac{\text{req'd residual in PPM}}{1,000,000 \times \text{hypo \%}} \right)}$$

- This is simply the previous equation multiplied by the conversion factor of 8.33 pounds per gallon of water.

Let's assume that we still need to Disinfect 5,000 gallons at 100 ppm.How many pounds of 65% calcium Hypite (HTH pool cleaner) are needed?

●  $(8.33 \text{ lbs/gal.} \times 5,000 \text{ gal} \times 100 \text{ Ppm}) / (1,000,000 \times .65) = 6.4 \text{ Pounds.}$

## Note:

Store in cool place

**UN No :** 1791

**IMDG CLASS :** 8

**PACKING GROUP :** III

**ODOUR :** IRRITATING , PUNGENT ODOUR.

**R31:** Contact with acids liberates toxic gases.

**R34:** Causes burns.

S-PHRASES

**S1/2:** Keep locked up and out of the reach of children.

**S28:** After contact with skin, wash immediately with plenty of water.

**S45:** In case of accident or if you feel unwell, seek medical advice (show the label where possible).

**S50:** Do not mix with acids.

**S50:** Do not mix with reducing agents.

**X2:** Restricted to professional users. Warning! Avoid exposure - obtain special instructions before use.

## EMERGENCY AND FIRST AID PROCEDURES:

### **EYE:**

OBJECT IS TO FLUSH MATERIAL OUT IMMEDIATELY AND THEN SEEK MEDICAL ATTENTION IMMEDIATELY flush eyes with a directed stream of water at least 15 minutes while forcibly holding eye lids apart to ensure complete irrigation of all eye and lid tissue. Washing eyes within one (1) minute is essential to achieve maximum effectiveness. SEEK MEDICAL ATTENTION IMMEDIATELY.

### **SKIN:**

SEEK MEDICAL ATTENTION IMMEDIATELY. Flush thoroughly with cold water under shower while removing contaminated clothing and shoes. CONTINUE TO FLUSH UNTIL MEDICAL ATTENTION ARRIVES. Discard non-rubber shoes. Wash clothing before reuse.

### **INHALATION:**

Remove to fresh air. If breathing is difficult, have trained person administer oxygen. If respiration stops, give mouth-to-mouth resuscitation. GET MEDICAL ATTENTION IMMEDIATELY.

### **INGESTION:**

NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of milk or gelatin solution. If these are not available give large quantities of water. If vomiting occurs spontaneously, keep airway clear and give more milk, gelatin solution or water, GET MEDICAL ATTENTION IMMEDIATELY. Avoid vomiting, lavages or acidic antidotes.

**NOTE TO PHYSICIAN:** Sodium Hypochlorite is an alkaline corrosive. For exposure by ingestion do not use emesis, lavages or acidic antidotes. Dilute immediately by giving milk, melted ice cream, beaten egg white, starch paste or antacids such as milk magnesia. Aluminum hydroxide gel or magnesium trisilicate gel. Avoid sodium bicarbonate because of carbon di-oxide release. Sodium thiosulphate solution may prove beneficial by reducing unreacted material.

