# 14% SODIUM HYPOCHLORITE SOLUTION

## DESCRIPTION

Sodium Hypochlorite is a powerful disinfectant; it is effective against a wide spectrum of micro-organisms, including vegetative and sporing bacteria, moulds and mould spores, yeasts and viruses. Sodium Hypochlorite also removes staining, flavouring and odours.

## **USE INSTRUCTIONS**

In use concentrations of Sodium Hypochlorite are application dependent and should be established during trials. A 1% v/v solution of Sodium Hypochlorite delivers approximately 1800 ppm available Chlorine.

Cleaning temperatures should be optimised during trials. However, it is not advisable to use chlorinated products above 50°C.

Sodium Hypochlorite is not normally used for direct food contact, but can be used for vegetable and produce washing applications.

The following are typical example applications, users should refer to Cleaning Instruction Cards for specific guidance. Other applications should be discussed with your Holchem Consultant.

Surface Disinfection. Sodium Hypochlorite is used as a disinfectant following thorough cleaning and rinsing. Recommended use concentration is 50 ppm to 500 ppm Av. Cl (0.03% to 0.3% v/v), with a contact time of 15 to 20 minutes. On food contact surfaces, the surface should be rinsed with potable water after a contact time of 15 to 20 minutes.

**Drain Disinfection.** Sodium Hypochlorite is used as a drain disinfectant and is very effective against Listeria. However, heavy soiling in drains will neutralise the antimicrobial activity. It is recommended that drains are flushed with water before dosing with Sodium Hypochlorite at 50 ppm – 500 ppm. It is essential to check that acid is not being released to a common or interlocking drain.

**Vegetable and Produce Washing.** Sodium Hypochlorite can be used for vegetable washing at 50 ppm to 200 ppm free Chlorine. In this application it is recommended that the pH is controlled to between 7 and 8, using food grade Citric Acid for maximum efficacy. It is essential that the pH is controlled using a well maintained, automatic dosing system; if the pH is allowed to drop below 6 the combination of acid and Sodium Hypochlorite will release Chlorine Gas. It is recommended that following washing the vegetables are spun dried or washed in potable quality water. For non-rinse applications, it is the responsibility of the end user to confirm that produce is free from residues.

## BENEFITS

- High activity.
- Wide spectrum of activity.

## **TECHNICAL DATA**

Appearance	Clear, pale yellow non-viscous liquid	
Odour	Chlorine	
Foam	No foam	
Specific Gravity at 20°C	1.26	
pH (1% solution at 20°C)	11.8 - 12.2	
Mercury	0.05 mg/L(max)	
Cadmium	0.01 mg/L(max)	
Storage Temperature Range	-10°C to + 30°C	
Shelf Life	Maximum of 4 months under normal conditions	
Holchem Classification	CHLORINATED	



Holchem Laboratories Ltd Gateway House, Pilsworth Road, Pilsworth Industrial Estate, Bury, Lancashire. BL9 8RD T: 01706 222288 E: info@holchem.co.uk

# 14% SODIUM HYPOCHLORITE SOLUTION

## **PRODUCT COMPATIBILITY**

CAUTION: Contact with acid liberates Toxic Chlorine Gas.

Sodium Hypochlorite is an effective oxidising biocide against a wide range of organisms and is safe for use on most materials of construction. For soak applications care should be taken on Aluminium, Copper, Zinc or their alloys. It is always advisable to evaluate individual materials before prolonged use. On Stainless Steel, pitting corrosion may occur if the product is used regularly at high concentrations.

## **BIODEGRADABILITY**

This product consists of inorganic materials for which biodegradation assessment is not required. Not expected to Bioaccumulate.

# **TEST METHODS**

## DROPPER TEST (AVAILABLE CHLORINE TEST KIT)

Reagent	Ref.	Equipment	Ref.
CL1	SKS00802-06	20 ml Syringe	SKS00822
CL2	SKS00802-05	Polycarbonate Test Jar	SKS00823
CL3	SKS00802-04		

## Step Method

- 1 Using the syringe, transfer 10 ml of the test solution into the test jar and dilute to approximately 20 ml.
- 2 Add 20 drops of CL1 into the test jar and swirl.
- 3 Add 10 drops of CL2 into the test jar and swirl. If chlorine is present the test solution will turn dark blue/black.
- 4 Add CL3 dropwise, swirling the bottle after each addition until the solution becomes colourless. Note the number of drops of CL3.

ppm available chlorine = (No. of drops of CL3) x 20

A TEST KIT IS AVAILABLE FROM HOLCHEM FOR MEASURING FREE CHLORINE RATHER THAN AVAILABLE CHLORINE

## SAFE HANDLING & STORAGE

Keep in original container. Keep containers tightly closed. Store away from acids.

COSHH places a duty on employers to assess and control the risks of using hazardous substances. The Safety Data Sheet provides the relevant information about the product to assist with this assessment.

## PACKS

The product is available in the following pack sizes:

25 Kg 250 Kg

# 1250 Kg

## GENERAL

For accident, emergency and health & safety information refer to the Safety Data Sheet for this product. This product is registered with the National Poisons Information Service.

## **EMERGENCY TELEPHONE NUMBERS**

Outside Office Hours: - For accidents and spillages involving this product that pose a threat to the<br/>environment, or human health, or require immediate first aid advice call: - +44(0) 7050 265597.Note: This number will not accept order queries or calls dealing with equipment breakdowns.Environment Agency (24 hr Advisory Service)0800 807060Irish Environment Protection Agency1890 335599

Whilst every effort is made to ensure that the information given in this product information sheet is accurate it is given without guarantee, since the conditions of use are beyond our control.

