



## KINTAB BLEACH TABLETS

Learn about enzymes.....

Learn about chlorine.....

Learn about clinical waste.....

BIOHAZARD KITS

BLEACH TABLETS

FOOD  
DISINFECTANT

SPILLAGE  
COMPOUND

SNOW / ICE  
MELT

GRAFFITI  
REMOVER

FRAGRANCES

ENZYME ODOUR  
ELIMINATOR

ENZYMES FOR  
DRAINS

REPAIR  
COMPOUNDS

FLY  
REPELLANT

**T**ried and tested. The benefits of chlorine / bleach tablets have long been appreciated by the Health Service. They have been specified for use by the Public Health Laboratory Service.

**H**ighly effective. Independent tests have shown that chlorine / bleach tablets are more active against micro-organisms than sodium hypochlorite especially in the presence of soiling.

**E**conomic. Because the chlorine is presented in tablet form, portion control is possible and real economies can be made. Storage and distribution costs are significantly reduced.

**C**onvenient. Simple and easy to use. Just add chlorine / bleach tablets to water to obtain the required strength. No mess, no spillage, no stains, and a reduced likelihood of accidents.

**A**ccurate. The accuracy of solutions is assured. Each chlorine / bleach tablet yields a known level of available chlorine (200ppm in 5 litres) essential where effective disinfection is concerned.

**S**table. Sodium hypochlorite is renowned for its instability and rate of degradation. Chlorine / bleach tablets provide a suitable alternative. Tests have proved long-term stability.

**E**ffervescent. KIN-TAB chlorine / bleach tablets are a combination of NaDCC and inert effervescent components. These aid fast dissolution which can be improved further by adding to warm water.

# FOR KINTABS

In the fight against disease, mankind has developed ways of destroying harmful bacteria and other organisms. These methods include the use of heat, irradiation and most common of all the use of chemical disinfection. The use of chemicals can be traced back many years and the most common and effective one, chlorine, was first used in 1789. Though numerous other chemicals such as quaternary ammonium compounds have appeared on the scene, chlorine is still recognised as the most effective disinfectant. It is for this reason that chlorine is specified in the treatment of areas subject to contamination by the AIDS virus and other highly infectious organisms.

Chlorine can be presented in many forms, such as liquid, (e.g. sodium hypochlorite) A powder e.g. (calcium hypochlorite) and latterly in tablet form (sodium dichloroisocyanurate). The most common method of supply has been in the form of sodium hypochlorite (NaOCL) or liquid bleach as it is often referred to. The reason for this is that it is in plentiful supply, and on the face of it at least, it is a cheap means of obtaining a disinfectant solution.

The truth is that the use of NaOCL is a false economy and NaOCL is also hazardous to handle in its concentrate form. It is rare that users accurately measure the amount of NaOCL when making up solutions; they frequently overdose. Tests carried out on solutions used in public health laboratory showed up to four times the required strength. Sodium hypochlorite is inherently unstable, and the strength at point of manufacture is no guarantee of strength at point of use. The product degrades, and the rate of degradation increases in line with rises in ambient temperatures and exposure to sunlight.

The need for the use of special vented closures on containers of strong NaOCL solutions can lead to spillage in transit and this is especially dangerous if the NaOCL comes into contact with acids causing the liberation of chlorine gas. Spillage and splashing of the product when making up working solutions can cause injury to eyes, skin, and mucous membranes as well as damage to fabrics, clothing etc.

Sodium Hypochlorite is also highly corrosive to most metals in common use, especially mild steel and even galvanizing affords little protection. Overdosing merely exacerbates the problem, and increases the risk of injury or damage. Furthermore, chlorine as presented by NaOCL is readily inactivated in the presence of soiling.

How then can one provide chlorine solutions in such a way as to overcome these numerous disadvantages?

# KINTABS

The answer is simple.....

## effervescent chlorine tablets

### DESCRIPTION

KIN-TAB chlorine tablets are a mixture of sodium dichloroisocyanurate (NaDCC) and inert compounds which are compressed into tablet form. When placed in water the effervescent components ensure rapid dissolution which can be further enhanced by the use of warm water. Each 3 gram tablet will produce a minimum of 200ppm available chlorine in 5 litres of water.

### STABILITY

They are extremely stable when stored in their containers, with a shelf life of at least two years, or even longer when kept dry. This enables end users who possess no technical knowledge to produce accurate in-use solutions. Additionally the chances of overdosing are reduced because the chlorine tablet represents a pre-measure dose.

### ACCEPTANCE

The chlorine tablets have been recognised as a valuable alternative to sodium hypochlorite in the Health Service and in the cleaning industry in general. They have been specified for use by the Public Health Laboratory Service.

### EFFECTIVENESS

Independent tests have shown that NaDCC is more effective against micro-organisms than NaOCL for two major reasons.

1. With NaDCC solutions a pH of 6.2 is exhibited compared to NaOCL solutions which range from pH9 upwards. The effect of hypochlorous acid, the active ingredient of both compounds, is enhanced as acid pH, and therefore a higher kill rate is achieved.

2. With NaOCL the chlorine is liberated as free chlorine and in the presence of organic matter this is readily inactivated. With NaDCC solutions, the chlorine is presented as both free and combined, thus ensuring a continuous and steady release of the active ingredient.

### CORROSION

The problem of corrosion, so long a disadvantage where NaOCL is concerned, has often resulted in the use of more expensive and less effective alternatives. This problem has been greatly diminished by using NaDCC tablets. Independent tests demonstrate that solutions as strong as 1000ppm (0.1%) had little or no effect on most metals even after 100 hours exposure. ( See table 1)

**TABLE 1** Shows the immersion for total of 100 hours solution renewed every 25 hours.

			NaDcc			ppm av. Cl		
						NaOCL	ppm av. CL	
Metal	Water	5	125	1000	5	125	1000	
Mild Steel	+++	+++	+++	+++	+++	+++	++++++	
Gal,Mild Steel	+	+	+	+	++	++	++++++	
Copper	+	++	++	+++	++	+++++	++++++	
Brass	-	-	+	+++	-	-	++	
Aluminum	+	-	+	+	+	++	+++	
Stain. Steel	-	-	-	-	-	-	-	

- No effect
- + Mild tarnishing
- ++ Moderate tarnishing
- +++ Pronounced tarnishing
- ++++ Mild corrosion
- +++++ Moderate corrosion
- ++++++ Pronounced corrosion

### CONVENIENCE of chlorine tablets

Tablets are convenient, safer, easy to use and enable cleaning supervisors to implement maximum control of their issue and use.

The following (Table 2) shows specific applications and recommended dilutions.

AREA OF USE	NO.OF TABLETS	LITRES OF WATER	METHOD
Food preparation surfaces, tables and counters	1	5	Wash thoroughly with a neutral detergent. Rinse with chlorine solution
Food processing equipment	1	5	Wash thoroughly with a neutral detergent. Rinse with chlorine solution
Walls floors	1	5	Wash thoroughly with a neutral detergent. Rinse with chlorine solution, or add to neutral detergent
Drains, W.C. Pans, Sinks, Drains	2	5	Use bristle brush or swab. Alternatively drop Kin-tab in W.C. water trap
Sanitising Glassware	1	10	Just add to rinse water. Immerse for a minimum of 2 minutes. Allow to dry

More general uses of Kin-tab chlorine tablets are:-

### Hospitals / Nursing Homes

Chlorine as a disinfectant is extensively used in hospitals but is vitally important to produce disinfection solutions of known strength. Recommendations in the U.K. according to the Howie Code of Practice are:-

#### Available Chlorine in Solution

Cloths and mops	60 ppm	1 tablet per 17.5 litres water
Work surfaces, floors etc.	140 ppm	1 tablet per 7.5 litres water
Crockery, cutlery	140 ppm	1 tablet per 7.5 litres water
General disinfection	1000 ppm	1 tablet per 1.0 litre water
Laboratory work surfaces	1000 ppm	1 tablet per 1.0 litre water
Sink, Pipette Jars	2500 ppm	1 tablet per 0.4 litres water
Blood Spillage	10000 ppm	1 tablet per 0.1 litres water



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