

TECHNICAL BULLETIN



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CHLORINATED TSP **Powdered CHLORINE sanitizer.**

MATERIAL & FUNCTION

Chlorinated TSP is also known as Trisodium Phosphate, chlorinated; Sodium Hypochlorite Phosphate; and Pink TSP. Its uses include cleaning and sterilizing, formulating in detergents and also functions as a stain remover.

CAS Numbers: 11084-85-8 (used by AICS); 56802-99-4 (used by NTP)

CHLORINATED TSP powder has been formulated to make CHLORINE readily available when dissolved in water. This assures fast and effective destruction of microorganisms. Its anti-bacterial properties remain effective when used in hard water.

APPEARANCE

CHLORINATED TSP is a pink, free flowing powder producing clear solutions at use concentrations. It has a mild chlorine odour but contains no added perfumes. Sanitizing solutions leave no residual odours which would be likely to contaminate foods. Unlike some chlorine-yielding products, CHLORINATED TSP is readily and completely soluble, leaving no insoluble residues.

TYPICAL PROPERTIES

Appearance, odour: White or pink powder with slight chlorine odour.

Melting Point: Melts above 60°C losing water to give residue melting above 1000°C.

Density: 1.6g/cm³

Flash Point (Open Cup): Not relevant

Solubility in Water: 20g per 100 g @20°C

pH: 11.7 (10g/L solution @20°C)

Bulk Density: 0.7g/ml

Molecular Formula: $[\text{Na}_3\text{PO}_4 \cdot 11\text{H}_2\text{O}]_4 \cdot \text{NaOCl}$

Available Chlorine: 3.5% approx

Moisture (at 110 °C): 44.0-47.5

Water insolubles: 0.05%

P2O5: 17.5 - 19.5%

Loss on ignition: 45.0-49.0

APPLICATION

The anti-bacterial properties of chlorine have long been recognized and provided through one or another of the chlorine-releasing compounds now available, it is still the chemical bactericide most widely used throughout the world today. Chlorine is effective against a wide range of Gram-negative and Gram-positive bacteria as well as against yeasts and moulds.

CHLORINATED TSP is recommended for sanitizing of stainless steel plant and equipment in the food processing industry.

The ability of chlorine to destroy yeasts and moulds and their spores makes CHLORINATED TSP the ideal product for treating affected cold-rooms and refrigerators.

Putrefactive odours produced by bacterial action on organic matter are quickly removed by the action of CHLORINATED TSP making it a most useful product for effective deodorizing in many food applications.

CHLORINATED TSP may be used as: a soak sanitizer for sanitizing such equipment as syrup lines and Post-Mix units, a bath for sanitizing small items of plant and equipment and it lends itself ideally to use as a sanitizer in C.I.P. re-circulation systems. Heat is not required either to put CHLORINATED TSP into solution or to assist in sanitizing.

Solutions should be prepared using water at ambient temperature. In all cases, plant and equipment to be sanitized should first be cleaned and rinsed with clean water. CHLORINATED TSP is perfectly safe to use in food-preparation areas and will not taint or affect foods in any way when used as directed.

CHLORINATED TSP may be used for mould control. Walls and floors of cold-rooms and interior surfaces of refrigerator would first be washed with a detergent, which will have no adverse effects on stored foods - ALL KLEN is ideal for this purpose. Surfaces should then be sprayed or swabbed with a solution of 8 grams of CHLORINATED TSP per litre of water. If necessary, excess solution should be removed by damp mopping with a mop or cloth previously soaked in the sanitizing solution and wrung out.

CHLORINATED TSP may be used for odour control. Using a detergent such as ALL KLEN, first wash areas where soiling is suspected to be the source of odour. After cleaning, use a swab or mop to liberally flood the surfaces to be treated, using a solution of 6 grams CHLORINATED TSP per litre of water. Finish off by damp mopping with a mop previously soaked in the deodorizing solution and allow to air dry.

CHLORINATED TSP will yield 200 ppm of available chlorine when dissolved at the rate of 6 grams per litre of water. This should be used as the basis for calculating dosages required for particular applications. The strengths of sanitizing solutions and contact times will be dictated by the type of equipment being used and the nature of the foods being processed and may vary quite widely.

As a general rule, a solution to yield 200 ppm of available chlorine (6 grams per litre of water) and a contact time of 5 minutes will ensure destruction of all harmful microorganisms.

PACKAGING

25 kg bag.

IMPORTANT NOTICE TO CUSTOMER

*Since the use of this product is beyond the control of either seller or manufacturer, their only obligation shall be to replace any quantity of product, which is proven defective. They cannot assume any risk or liability in excess of the purchase price of the product itself, which does not include labour or any consequential damages resulting from the use of this product. Determining the suitability of this product for any intended use shall be solely the responsibility of the user. **ALWAYS TEST FIRST.***