

PROXITANE

Peroxyacetic Acid Sanitiser

Product Description:

PROXITANE is sanitiser which is recommended for use on pre-cleaned surfaces such as equipment, pipelines, tanks, vats, filters, evaporators, pasteurisers, and aseptic equipment in dairies, brewers, wineries, beverage and food processing plants, egg processing/packing equipment surfaces and eating establishments.

PROXITANE has a high oxidation potential and is very reactive. It exhibits excellent bactericidal and fungicidal activity against a wide range of microorganisms in cold and warm water.

Also more effective than chlorine, chlorine dioxide and quaternary products for sanitising food contact surfaces.

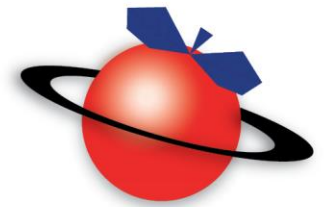
PROXITANE helps to control spoilage or decay-causing bacteria and fungi in water that contacts raw, unprocessed fruits and vegetables. PROXITANE can be continuously sprayed, using coarse spray, or submerged using solution containing no more than 40 ppm residual Peroxyacetic Acid. Contact time of 60 seconds minimum is recommended. A final water rinse is not necessary. Compatible with most post harvest fungicides.

This product is non-corrosive in its diluted form against stainless steel and aluminium surfaces. If the product is to be used on other surfaces, it is recommended that you apply product to a smaller test area to determine compatibility before proceeding with its use.

Application:

PROXITANE may be fed to either the system water or the make-up water at an area of good mixing to promote rapid dispersion. PROXITANE may be introduced continuously or intermittently depending upon needs of the end user.

An accurate and reliable test kit is available through Castle Fruit Coatings. Also available are automatic dosing systems that maintain the correct ppm levels.



Lab and Field Data:

Laboratory data using standard disinfectant test methods have shown that peroxygens are effective biocides against food poisoning and food spoilage microorganisms in a range of conditions representative of those in the food industry (Tables 1 and 2).

Peracetic acid has been compared with sodium hypochlorite using the European Standard Disinfectant Test (Table 3). Peracetic acid is effective at concentrations of active ingredient considerably lower than sodium hypochlorite, with particularly good performance against *Listeria monocytogenes*.

Table 1: Food Poisoning Bacteria

	Listeria monocytogenes	Salmonella typhimurium	Clostridium perfringens	Campylobacter jejuni
Water	PASS	PASS	PASS	PASS
Vegetable Soup	PASS	PASS	PASS	PASS
Chicken stock	PASS	PASS	PASS	>99.99%
Milk	PASS	PASS	>99.99%	NR

Table 2: Food Spoilage Bacteria

	Pseudomonas putida	Bacillus cereus
Water	PASS	PASS
Vegetable Soup	PASS	PASS
Chicken stock	>99.99%	PASS

Peracetic acid treatment of 50 mg/l

Exposure Time: 5 minutes

Pass indicates >99.99% kill

NR indicates no results available

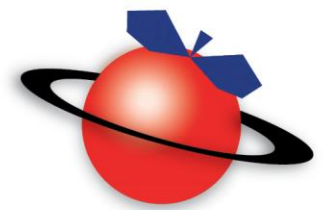


Table 3: Comparison of Peracetic Acid with Sodium Hypochlorite in the European Suspension Test

		Staphylococcus aureus		Pseudomonas aeruginosa		Saccharomyces cerevisiae		Listeria monocytogenes	
		Clean	Dirty	Clean	Dirty	Clean	Dirty	Clean	Dirty
Peracetic Acid mg/l	50	PASS	PASS	PASS	PASS	FAIL	FAIL	PASS	PASS
	100	PASS	PASS	PASS	PASS	PASS	FAIL	PASS	PASS
	200	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Hypochlorite Mg/1 AvC1	50	FAIL	FAIL	FAIL	FAIL	FAIL	FAIL	FAIL	FAIL
	100	FAIL	FAIL	FAIL	FAIL	FAIL	FAIL	FAIL	FAIL
	200	FAIL	FAIL	FAIL	PASS	PASS	FAIL	FAIL	FAIL
	400	PASS	FAIL	PASS	PASS	PASS	PASS	FAIL	FAIL

Exposure time: 5 minutes
Pass indicates >99.999% kill

Processed Vegetables

Microorganism analysis on treated vegetables also shows peracetic acid to be a better treatment to hypochlorite with lower microorganism numbers and improved shelf life. (Table 4).

Beansprout Production

Sodium hypochlorite has been traditionally used as a soak disinfectant for mung beans to control Listeria, Salmonella and the mould, Rhizopus, on beansprouts. A level of 400 mg/l available chlorine is necessary for the disinfection process to be effective. Peracetic acid products can be used at a much lower concentration as an alternative and more effective treatment comparable disinfection is achieved with 50 mg/l peracetic acid (Table 5),

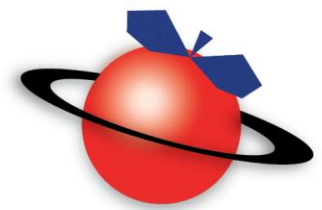


Table 4: Comparison of Peracetic Acid with Sodium Hypochlorite for Disinfection of Iceburg Lettuce

Treatment	Total Viable Counts cfu/g	
	Day 1	Day 3
Water	2.4 X 10 ⁶	3.5 X 10 ⁷
Hypochlorite 75 mg/l	6.6 X 10 ⁵	1.0 X 10 ⁷
Peracetic Acid 50 mg/l	6.1 X 10 ⁴	7.6 X 10 ⁴
Peracetic Acid 100 mg/l	8.1 X 10 ⁴	7.2 X 10 ⁵

Exposure Time: 5 minutes

Peracetic acid treatment was followed by a 2 minute rinse with sodium thiosulphate (5g/l)

Table 4: Comparison of Peracetic Acid with Sodium Hypochlorite for Disinfection of Mung Beans

Treatment	Total Viable Counts (Microorganisms/g)	Moulds and Yeasts (Microorganisms/g)	Listeria	Salmonella
Water	12,000	1,000,000 +	Positive	Not Present
200mg/l AvCl	1,500	70	Positive	Not Present
400 mg/l AvCl	1,200	300	Negative	Not Present
25 mg/l PAA	2,000	50	Positive	Not Present
50 mg/l PAA	1,200	120	Negative	Not Present
100 mg/l PAA	380	90	Negative	Not Present

SHELF LIFE:

As a quality assured manufacturer, Castle Chemicals has a stringent Quality assurance programme. As part of this regime, the label on this product shows a batch number and date of manufacture. This product has a shelf life of 24 months from the label printed date of manufacture. This information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Castle Chemicals assumes no responsibility for personal injury or property damage to vendees, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of material.

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