

# Cidox

## Chlorine Dioxide Disinfection Tablets



### TECHNICAL DATA SHEET

#### Description

Cidox uses the power of  $\text{ClO}_2$  to make a high level sporicidal disinfection solution that is more powerful, yet uses 10 times less chemicals than equivalent chlorine tablets or bleach. Provided as a safely packaged, single use tablet, Cidox is dropped into the required quantity of water of room temperature to make a powerful disinfection solution that can be used in the most challenging applications. Cidox solutions are less corrosive than equivalent chlorine or peroxide disinfectants, whilst providing sporicidal, fungicidal, bactericidal and viricidal effectiveness when tested against the most challenging European Standards.

Cidox™ 300 can be used as a general area disinfectant and in the following areas;

- **Agriculture:** Disinfectant, equipment sterilisation
- **Disaster response:** Eliminating mould and mildew from floods and damaged areas
- **Food processing:** Surface and utensil sterilisation, washing fruit, vegetables and utensils
- **Healthcare:** General disinfection use in healthcare areas including the cleandown of hard surfaces, mattress covers and walls / floors
- **Laboratory:** Equipment sterilisation
- **Health spas:** Sterilisation of equipment and service areas

#### Active Ingredient

Chlorine Dioxide ( $\text{ClO}_2$ ) has unrivalled disinfecting power, with lower corrosion rates, greater selectivity to target biological contaminants, and significantly fewer environmental side effects compared to bleach and chlorine tablets. It is a fast-acting, highly convenient, and more accurate alternative to liquid bleach and chlorine tablets requiring a lower dose rate.

#### Characteristics

Active Ingredient	Chlorine Dioxide
Usage Scenario	<b>PT2</b> Disinfectants and algacides not for direct application to skin <b>PT3</b> Veterinary hygiene <b>PT4</b> Food and feed area <b>PT11</b> Preservatives for liquid cooling and processing systems <b>PT12</b> Slimicides
CAS Number	N/A
Colour	Off-White
Odour	Slight Chlorine
Solubility in Water	Soluble
pH	2.5 - 4.5

#### Features and Benefits

- More effective – fast acting disinfection, more powerful than chlorine
- Easier to Handle – No mixing of powders or liquids and no need to store different chemicals
- Reduced Environmental Hazards – does not damage drainage systems due to the discharge of concentrated chlorine or peroxide disinfectants

#### Regulatory Compliance

Cidox tablets are intended for use in accordance with the terms of the EU Biocidal Product Regulation (BPR, Regulation (EU) 528/2012). Approved for sale in the UK. The product is labelled in accordance with the Classification, Labelling and Packaging (CLP) Regulation ((EC) No 1272/2008).

## Instructions for Use

Dissolve tablets in the volume of water stated on the dilution table to achieve the required concentration.

Specific Instructions:

- Add one Cidox tablet to 25 litres of water for use as a general area disinfectant.
- For high-level sterilisation of instruments and utensils in laboratories and food processing environments add one tablet to 3 litres of water.
- Add one tablet to 6 litre to make a disinfecting solution suitable for spot and high-level spray disinfection applications.

## Safe Handling and Storage

Store in original container. Keep tightly closed in a cool dry place.

Use biocides safely. Always read the label and product information before use.

## Safety Data Sheet

For information on safe handling, a safety data sheet containing additional data for Cidox is available on request.

## DILUTION TABLE

Target	Surface	Tablets	Litres	Concentration in ppm	Contact Time	Ct in mg-min/L
Bactericidal	Clean	1	4	75	1 min	75
	Dirty	1	3	100	5 min	500
Yeasticidal	Clean	1	30	10	1 min	10
	Dirty	1	3	100	5 min	500
Fungicidal	Clean	1	3	100	5 min	500
	Dirty	1	0.6	500	5 min	2500
Mycobactericidal	Clean	1	6	50	5 min	250
	Dirty	1	1.2	250	5 min	1250
Virucidal	Clean	1	4	75	5 min	375
Sporicidal	Clean	1	3	100	5 min	500
	Dirty	1	1.2	250	5 min	1250

## BIOCIDAL EFFICACY

Test Method	Target	Test Organisms	Ct (mg-min/L)	Test Condition	Log Reduction Required*	Result (log reduction)	Test Reference
EN1276	Bacteria	<i>P. aeruginosa</i>	50	Clean	>5	>5.17	0512B
		<i>S. aureus</i>	50	Clean	>5	>5.41	
		<i>E. hirae</i>	50	Clean	>5	>5.13	

Test Method	Target	Test Organisms	Ct (mg-min/L)	Test Condition	Log Reduction Required*	Result (log reduction)	Test Reference
EN1276	Bacteria	<i>E. coli</i>	30	Clean	>5	>5.52	0512B
		<i>L. pneumophila</i>	50	Clean	>5	>5.03	
EN13727	Bacteria	<i>P. aeruginosa</i>	75	Clean	>5	>5.22	SC016H-2005/2
		<i>S. aureus</i>	75	Clean	>5	>5.15	
		<i>E. hirae</i>	75	Clean	>5	>5.17	
		<i>E. coli</i>	75	Clean	>5	>5.15	
		MRSA	75	Clean	>5	>5.15	
		<i>P. aeruginosa</i>	500	Dirty	>5	>5.29	
		<i>S. aureus</i>	250	Dirty	>5	>5.32	
		<i>E. hirae</i>	500	Dirty	>5	>5.25	
		<i>E. coli</i>	250	Dirty	>5	>5.28	
EN14561	Bacteria	<i>P. aeruginosa</i>	500	Clean	>5	>5.19	SC016H-2005/3
		<i>S. aureus</i>	250	Clean	>5	>6.10	
		<i>P. aeruginosa</i>	1250	Dirty	>5	>5.98	
		<i>S. aureus</i>	1250	Dirty	>5	>6.10	
		<i>E. hirae</i>	1250	Dirty	>5	>6.19	
EN1650	Yeast	<i>C. albicans</i>	225	Clean	>4	>4.22	SC016H-1909/1
	Fungi	<i>A. brasiliensis</i>	1125	Clean	>4	>4.02	
EN13624	Yeast	<i>C. albicans</i>	10	Clean	>4	4.05	SC016H-2005/3
		<i>C. albicans</i>	500	Dirty	>4	>4.10	
	Fungi	<i>A. brasiliensis</i>	500	Clean	>4	>4.17	
		<i>A. brasiliensis</i>	2500	Dirty	>4	>4.21	
EN13697	Bacteria	<i>P. aeruginosa</i>	200	Clean	>4	>5.69	SC016H-2005/2
		<i>S. aureus</i>	250	Clean	>4	>5.23	
		<i>E. hirae</i>	200	Clean	>4	>6.32	
		<i>E. coli</i>	125	Clean	>4	>5.37	
		<i>P. aeruginosa</i>		Dirty	>4		

Test Method	Target	Test Organisms	Ct (mg-min/L)	Test Condition	Log Reduction Required*	Result (log reduction)	Test Reference
EN13697	Bacteria	<i>S. aureus</i>		Dirty	>4		SC016H-2005/2
		<i>E. hirae</i>		Dirty	>4		
		<i>E. coli</i>		Dirty	>4		
	Yeast	<i>C. albicans</i>		Clean	>3		
		<i>C. albicans</i>		Dirty	>3		
	Fungi	<i>A. brasiliensis</i>		Clean	>3		
<i>A. brasiliensis</i>			Dirty	>3			
EN14348	Mycobacteria	<i>M. avium</i>	125	Clean	>4	>4.49	SC016H-2005/3
		<i>M. terrae</i>	250	Clean	>4	>6.31	
		<i>M. avium</i>	1250	Dirty	>4	>5.19	
		<i>M. terrae</i>	1250	Dirty	>4	>5.24	
EN14476	Virus	<i>Poliovirus-1</i>	375	Clean	>4	>5.67	SC016H-1909/1
		<i>Adenovirus-5</i>	375	Clean	>4	>5.5	
		<i>Murine norovirus</i>	375	Clean	>4	>4	
EN13704	Fungal Spore/ Bacterial Spore	<i>C. difficile</i>	500	Clean	>3	>3.08	SC016H-2005/3
		<i>B. subtilis</i>	375	Clean	>3	>3	SC016H-1909/1
		<i>B. cereus</i>	500	Clean	>3	>3.51	SC016H-2005/3
		<i>C. difficile</i>	1250	Dirty	>3	>3.05	
		<i>B. cereus</i>	1250	Dirty	>3	>3.23	

**EN1276:2010** Quantitative suspension test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic and institutional areas.

**EN13727** Quantitative suspension test for the evaluation of bactericidal activity in the medical area.

**EN14561:2006** Quantitative carrier test for the evaluation of bactericidal activity of instrument disinfectants intended for use in the medical area.

**EN 1650:2008+A1:2013** Quantitative suspension test for the evaluation of fungicidal or yeasticidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic and institutional areas.

**EN13624:** Quantitative suspension test for the evaluation of fungicidal or yeasticidal activity in the medical area.

**EN 13697:2015** Quantitative non-porous surface test for the evaluation of bactericidal and/or fungicidal activity of disinfectants used in food, industrial, domestic and institutional areas.

**EN 14348:2005** Quantitative suspension test for the evaluation of mycobactericidal activity of chemical disinfectants in the medical area including instrument disinfectants.

**EN 14476:2013+A1:2015** Quantitative suspension test for the evaluation of virucidal activity of disinfectants intended for use in the medical area.

**EN 13704:2018** Quantitative suspension test for the evaluation of sporicidal activity of chemical disinfectants used in food, industrial, domestic and institutional areas.

\* 4 log reduction = 99.99%. 5 log reduction = 99.999% etc.