

## Product Information

### ProClin 950 Preservative for Diagnostic Reagents

#### Manufacturing Specifications

Total Active Ingredient (%) 9.5%-9.9%

#### Formulation

Active Ingredient  
 2-Methyl-4-isothiazolin-3-one  
 Water

#### Chemical/Physical Properties\*

Appearance	clear liquid
Color (APHA)	<100
pH (10% solution)	5-8
Specific Gravity	1.02
Solubility	Totally miscible in water; lower alcohols and glycols, low solubility in hydrocarbons

Typical Use Levels 0.05%-0.1%

#### Shelf Life

Two years at ambient temperatures and at least six months at 50°C.

#### Directions for Use

ProClin 950 preservative should be added as the last ingredient and at the lowest temperature (<45°C) if possible. We urge each manufacturer to confirm the efficacy and stability of ProClin 950 in use.

#### Conversion of % Active Ingredient to % Product

Active Ingredient		% Product
PPM	%	ProClin 950
50	0.0050	0.053
75	0.0075	0.079
100	0.0100	0.105

#### Microbiological Efficacy

ProClin 950 preservative exhibits outstanding antimicrobial activity, inhibiting a wide variety of gram-negative bacteria, yeast and molds.

The table at the top of the next column gives the minimum inhibitory concentration (MIC) in ppm active ingredient methylisothiazolinone, which inhibited the growth of various microorganisms in broth tests.

#### MIC Values

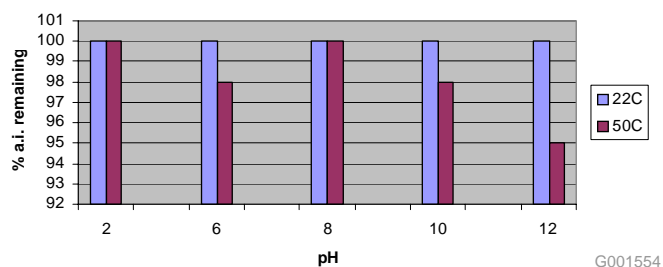
Minimal inhibitory concentration test parameters: nutrient broth, 30°C/pH 7, 24 hour contact time, ProClin 950 and commercial preservatives, microorganisms - ATCC and product isolate; 7 bacteria, 1 yeast, 2 molds.

Organism	ATCC No.	MIC (ppm a.i.)
<b>Bacteria</b>		
Enterobacter aerogenes	15038	30
Pseudomonas aeruginosa	15442	40
Burkholderia cepacia	17765	20
Pseudomonas oleovorans	8062	30
Pseudomonas putida	795	20
Staphylococcus aureus	6538	40
Serratia marcescens	Lab Isolate	30
<b>Fungi</b>		
Aspergillus niger	6275	3
Penicillium oxalicum	24784	80
Candida albicans	11651	40

#### Chemical Stability

ProClin 950 Preservative is stable over a wide range of pH and temperature conditions.

#### Effect of pH and Temperature in Buffered Water (methylisothiazolinone stability after 3 weeks)



#### Analytical Procedures

High Performance Liquid Chromatography (HPLC) analysis is the preferred method for determining low levels of ProClin 950. Please request Bulletin 904 for more information.

#### Ordering Information

Description	Cat. No.
<b>ProClin 950 Preservative</b>	
5mL ampul	46885-U
50mL bottle	46878-U
400mL bottle	46879-U
3.6L bottle	46883-U
17L bucket	46884-U

\*These values do not constitute specifications.

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