

# BIO-1465 I

## Broad Spectrum Micro-Biocide for Industrial Cooling Water Systems.

### Description and Use

BIO-1465 I is a broad spectrum, non-foaming, readily biodegradable micro-biocide for use in industrial cooling water systems. It is based on a formulation of Isothiazoline derivatives and is completely soluble in water. At relatively low concentrations it is effective against a range of microorganisms including many gram positive and gram negative bacteria, fungi and algae.

BIO-1465 I is effective over a wide range of pH and can be used in isolation or alternately with other non-oxidising or oxidising biocides.

### Product Benefits

Highly effective non-oxidising biocide  
Non-ionic  
Versatile multi-use product

### Dosage Rates & Applications

BIO-1465 I should be dosed periodically at a rate of 100 – 200 ppm of the total system volume.

In a badly fouled system, an initial shock dose of up to 500 ppm may be required.

BIO-1465 I is effective over a wide range of pH and can be used in isolation or alternately with other non-oxidising or oxidizing biocides.

For chilled water and LTHW systems:

In order to control potentially problematic microbial contamination, it is recommended for chilled water and LTHW applications that the system is dosed initially with Accepta 2827 at the rate of 200 – 500ml / 1000 litres of system volume and that is repeated once every 3 months.

The microbial activity (TVC) in the system can be monitored using microbial dipslides. Good control is indicated by a general bacteria level (TVC) of no more than 10<sup>3</sup> cfu/ml. If pseudomonas or other specific testing is required then contact our laboratory and we will be pleased to help you.

1000 litres of system volume as a shot dose and then dose the system with a shot dose of the second biocide at the next scheduled dosage before reverting to BIO-1465 I for the third dosage etc.

The required frequency of biocide dosage will depend on the retention time of the cooling system and tendency of the system to become contaminated with nutrients that will encourage microbial growth.

A typical biocide dosing frequency for systems with a long retention time would be once / week but for systems which change their water more frequently and have a short retention time then the frequency of dosages will need to be increased (typically twice per week).

The general microbial activity (TVC) in the system can be monitored using microbial dipslides. Good control is indicated by a general bacteria level (TVC) of less than 10<sup>4</sup> cfu/ml. It is recommended that

a dipslide test is taken weekly and the system is tested specifically for legionella bacteria at least once per quarter (contact our laboratory)

Although we primarily recommend monitoring efficacy via microbial testing; product residual can be monitored using an Isothiazolinone test kit, you should see a reserve of between 3 – 7.5ppm for dosage rates of 200 – 500ml/m<sup>3</sup>.

### For open evaporative cooling systems:

In order to prevent the development of resistant microbial strains Accepta 2827 should normally be used in conjunction with another biocide such as [BCBQ / AT-2301](#) and the two biocides should be dosed alternately.

A typical dosing regime would be to dose the system with 200ml of Accepta 2827 / 1000 litres of system volume as a shot dose and then dose the system with a shot dose of the second biocide at the next scheduled dosage before reverting to **BIO-1465** for the third dosage etc.

The required frequency of biocide dosage will depend on the retention time of the cooling system and tendency of the system to become contaminated with nutrients that will encourage microbial growth.

A typical biocide dosing frequency for systems with a long retention time would be once / week but for systems which change their water more frequently and have a short retention time then the frequency of dosages will need to be increased (typically twice per week).

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### Product Properties

Form:	Liquid
Colour:	Pale green
Specific gravity:	1.00 – 1.02
pH:	3.0 – 5.0
Solubility:	Completely soluble
Boiling point:	100 oC

Use biocides safely. Always read the label and product information before use. See safety data sheet for safety and handling precautions