

# Slow release, Long-life Biocide

To prevent and control biological growth in cooling & heating systems

## Application

Purachem BIO2 is a slow-release, long-life, non-oxidising biocide with antifoam properties. BIO2's wide operational pH and effectiveness at higher temperatures (up to 80°C) make it ideally suited to all types of hydronic heating systems.

The versatility and longevity of this product make it an ideal choice for systems being put into hibernation or laid up for prolonged periods or as part of a routine maintenance cycle to ensure the control of biological growth.

Based on Isothiazolinone, this product is highly efficient against a broad spectrum of bacteria, mould, algae and yeast.

## Benefits

- Slow Release, Long Life
- Non-Oxidising, Non-Corrosive
- Can be added to existing system fluids
- Effective neutralisation of bacteria & algae
- Excellent suspension of particulates
- Good thermal stability
- Hard water tolerant
- Cost effective and improves heat transfer rate

## Features

- Staphylococcus spp.
- Corynebacterium sp.
- Pseudomonas aeruginosa
- Bacillus subtilis
- Escherichia coli

For a comprehensive list visit [Purachem BIO2 product page](#)

## Dosing & Utilisation

Always take a system fluid sample prior to any remedial works to establish the fluid condition, Our [Fluid Management](#) or [Fluid Monitoring](#) services may be of interest if you need assistance with this.

### Recommended dosing for a clean system (preventative dose):

Dose Purachem BIO2 at per 2000 litres of system volume, or % v/v of the total system volume.

## Physical Properties

### Appearance

Clear beige to brown liquid

### Consistency

Low viscosity

### Density

1.01 - 1.1 g/cm<sup>3</sup>

### Odour

Characteristic to BIO2

### Foam

Low foam

### pH

13.6 - 14.3

### Active Biocide

BIT

### Container Sizes

Available in: 1, 5, 20 litre containers ( bulk containers & tankers available on request )

**Recommended dosing for a contaminated system (shock dose):**

Dose Purachem BIO2 at per 2000 litres of system volume, or % v/v of the total system volume.

**Recommended dosing for a scheduled dosing (maintenance dose):**

Dose Purachem BIO2 at per 2000 litres of system volume, or % v/v of the total system volume every six months.

We suggest sampling and analysing system fluids biannually to catch any issues early.

**Post-Commissioning - In-line Treatment**

1. Take a fluid sample before dosing to confirm the level of any existing biological activity.
2. Add Purachem BIO2 at suggested dose rate from above.  
To ensure effective mixing with the existing system fluid, dose using a proportional mixer or dosing pump.
3. Take a fluid sample three days after dosing to confirm all biological activity has been neutralised.

**Pre-Commissioning - Cleaning Procedure**

1. Take a fluid sample before dosing to confirm the level of any existing biological activity.
2. Add Purachem BIO2 at suggested dose rate from above.  
To ensure effective mixing with the existing system fluid, dose using a proportional mixer or dosing pump.
3. Vent the system of any trapped air.
4. Recirculate for a minimum of two hours and leave to 'stand' for a minimum of 3 days.
5. Drain all fluids before refilling with the required concentration of inhibited heat transfer fluid and good quality water.
6. Take a sample three days after commissioning to confirm all biological activity has been neutralised.

For more detailed information on the pre-commission and re-commission cleaning of pipe-work systems, please refer to BSRIA BG 29/2021 guide via [www.bsria.co.uk](http://www.bsria.co.uk)

**Hydratech Services Division**

The Hydratech Services division provides specialist engineering and maintenance services to customers installing, commissioning, operating or optimising closed loop cooling and heating systems. Hydratech's holistic approach to process and hydronic systems management maximises the potential for optimised performance, reduced operational costs and significant return on investment gains.

[Find out more about Hydratech Services](#)

**Quality Assured**

Purachem BIO2 is manufactured in accordance with ISO 9001: 2015 procedures.

**Storage & Shelf Life**

Maximum 10 months, if stored in its unopened original container, protected from extremes of temperature and out of direct sunlight.

**Health & Safety**

Please refer to the associated Safety Data Sheet, which is available online via Login and/or by mail.

**24/7 Technical Support**

Technical support services and products to ensure ongoing system efficiency and protection.

**tel. 01792 586800**

**[sales@hydratech.co.uk](mailto:sales@hydratech.co.uk)**

