Purachem BIO1

Fast-acting, Broad Spectrum Biocide

To prevent biological growth in cooling & heating systems

Application

Purachem BIO1 is a fast-acting, non-oxidising biocide combined with a highly effective bio-dispersant. Capable of rapidly neutralising a broad spectrum of bacteria, algae and fungi commonly found in heating, cooling and most closed water systems.

Based on Tetrakis phosphonium sulphate, this product offers an excellent environmental profile (at suggested doses) and is highly efficient against Legionella sp. and Pseudomonas sp.

Benefits

- Fast-acting
- Non-Oxidising
- Can be added to existing system fluids
- Effective neutralisation of bacteria, algae & fungi
- Excellent suspension of particulates
- Hard water tolerant
- Compatible with Halogen treatments
- Exceptional environmental profile
- Cost effective and improves heat transfer rate

Features

- Legionella pneumophila
- Klebsiella aerogenes
- Bacillus cereus
- Desulfovibrio vulgaris
- Escherichia coli

For a comprehensive list visit Purachem BIO1 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 BIO1 at per 2000 litres of system volume, or % v/v of the total system volume.

Recommended dosing for a contaminated system (shock dose):
Dose Purachem BIO1 at per 2000 litres of system volume, or % v/v of the

Physical Properties

Appearance
Pale yellow liquid

Consistency
Low viscosity

Density
101 - 1.1g/cm³

Odour
Characteristic to BIO1

Foam
Low foam

pH
2.0 - 4.0

Active Biocide
<4% active THPS

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

total system volume.

Recommended dosing for a scheduled dosing (maintenance dose): Dose Purachem BIO1 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 to ascertain existing biological activity levels.
2. Add Purachem BIO1 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 to ascertain existing biological activity levels (if applicable).
2. Add Purachem BIO1 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 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

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 BIO1 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

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