Purachem BIO3

Broad Spectrum Industrial Biocide

To prevent biological growth in cooling & heating systems

Application

Purachem BIO3 is a broad-spectrum industrial biocide, specifically formulated to combat bacteria commonly found in industrial closed-loop heating and cooling systems.

Highly miscible and compatible with most anionic, cationic and non-ionic treatments.

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

Benefits

- Broad spectrum biocide
- Readily biodegradable
- Highly miscible
- Non-foaming
- Compatible with most other treatments
- Low toxicity when dosed at recommended levels

Features

Purachem BIO3 has an operating temperature of up to 60°C and is effective over a wide pH range of 2 - 9.

Suitable for use as part of chemical cleaning policy, such as BSRIA BG 29/2021 and as part of a scheduled maintenance program.

This product has a broad spectrum of activity including efficacy against:

- Corynebacterium sp.
- Pseudomonas aeruginosa
- Kiebsiella sp.
- Escherichia coli
- Saccharomyces cerevisiae

For a comprehensive list visit Purachem BIO3 product page

Physical Properties

Appearance
Pale yellow liquid

Consistency
Low viscosity

Density
1.02

Odour
Characteristic to BIO3

Foam
Non-foaming

pH
2.5 - 3.8

Active Biocide
CIT/MIT

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

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 BIO3 at 600ml per 2000 litres of system volume, or 0.03% v/v of the total system volume.

Recommended dosing for a contaminated system (shock dose):
Dose Purachem BIO3 at 1 litre per 2000 litres of system volume, or 0.05% v/v of the total system volume.

Recommended dosing for a scheduled dosing (maintenance dose):
Dose Purachem BIO3 at 400ml per 2000 litres of system volume, or 0.02% 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 BIO3 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 BIO3 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

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.

Quality Assured

Purachem BIO3 is manufactured in accordance with ISO 9001: 2015 procedures.

Storage & Shelf Life

Maximum 10 months, when 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



Find out more about Hydratech Services