Purachem BIO4

Broad Spectrum Biocide

To prevent biological growth in cooling & heating systems

Application

Purachem BIO4 is a broad spectrum non-oxidising microbiocide with high efficiency against gram-positive & negative bacteria, including sulphate-reducing, aerobic & anaerobic types.

Based on Bronopol, this product is highly efficient in penetrating and eliminating biofilms and slime deposits while also controlling biological fouling, which is the cause of microbiologically influenced corrosion (MIC).

Benefits

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

Features

Purachem BIO4 has an operating temperature of up to 40°C and is effective over a wide pH range of 6 - 8.

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:

- Pseudomonas spp.
- Staphylococcus spp.
- Corynebacterium sp.
- Kiebsiella sp.
- Escherichia coli

For a comprehensive list visit Purachem BIO4 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 BIO4 at 600ml per 2000 litres of system volume, or 0.03% v/v of the total system volume.

Physical Properties

Appearance
Pale yellow liquid

Consistency
Low viscosity

Density
1.15 - 1.20g/cm³

Odour
Mild

Foam
Low foam

pH
2.0 - 3.0

Active Biocide
Bronopol

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 BIO4 at 800ml per 2000 litres of system volume, or 0.04% v/v of the total system volume.

Recommended dosing for a scheduled dosing (maintenance dose):
Dose Purachem BIO4 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 BIO4 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 BIO4 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.

Find out more about Hydratech Services

Quality Assured

Purachem BIO4 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

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