



BCP10 SURFACTANTS

BCP10 WILL DEGRADE COMPLEX ORGANIC CHEMICALS SUCH AS PHENOLS, BENZENE COMPOUNDS, SURFACTANTS AND ALCOHOLS

BIOAUGMENTATION WITH BCP10 CAN :

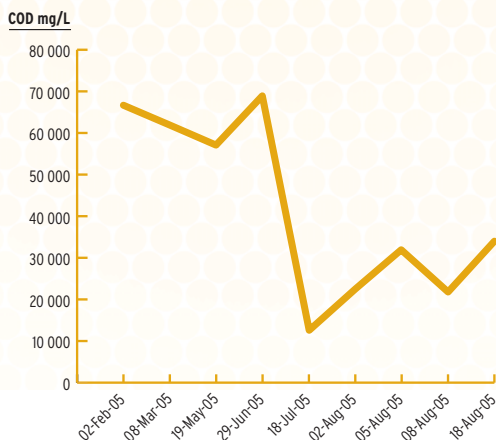
- Enhance BOD and COD removal while reducing sludge yield;
- Remove chemical deposits and prevent scum formation in holding tanks, sewers, drains and aeration basins;
- Prevent the blocking, ponding and possible collapse of filter bed media;
- Accelerate the removal of unpleasant odours;
- Increase the efficiency of overloaded treatment systems;
- Reseed after plant upset.

PRODUCT TEST

Introduction – A paint plant in the United Kingdom, with two holding tanks of 15m³ and 22m³, has a COD consent to discharge level of 70,000mg/L.

Treatment – Treatment began July 29, 2005 and continued for a period of 7 weeks until August 18, 2005. Pre-trial sampling showed the COD levels to be 57,300 and 68,100 mg/L. Maximum flow was 7.2 - 8.1 L/second for the period.

Results – COD levels declined to 33,800 mg/L. TSS levels also declined significantly over the period of the trial.



The decline in the COD levels following treatment permitted the paint company to meet current discharge levels and to realize cost savings associated with the lowering of the discharge.

SPECIFICATIONS

Description	Tan color, free-flowing granular powder
Packaging	250g water-soluble packages; 10kg plastic pail
Stability	Max. loss of 1 log/yr
pH	6.0 - 8.5
Bulk Density	0.5 - 0.61 g/cm ³
Moisture Content	15%
Nutrient Content	Biological nutrients and stimulants
Bacteria Count	5 billion per gram
Storage and Handling	DO NOT FREEZE! Store in a cool dry location. Do not inhale dusts. Avoid excessive skin contact. See MSDS.

BCP10

SURFACTANTS

APPLICATION INSTRUCTIONS

Treatment Plants –

Flow Rate	Initial Dosage	Maintenance**
Up to 0.1 L/sec	0.5kg/day for 3 days	0.5 kg/week
Up to 0.5 L/sec	0.5kg/day for 3 days	1.0 kg/week
Up to 2 L/sec	5 kg*	1.5 kg/week
Up to 5 L/sec	8 kg*	2.0 kg/week
Up to 25 L/sec	15 kg*	0.25 kg/day
Up to 50 L/sec	25 kg*	0.5 kg/day
Up to 100 L/sec	50 kg*	1.0 kg/day
Up to 500 L/sec	50 kg/100 L/sec*	1 kg/100 L/sec/day
Up to 1,200 L/sec	50 kg/100 L/sec*	0.75 kg/100 L/sec/day
Up to 10,000 L/sec	30 kg/100 L/sec*	0.5 kg/100 L/sec/day

*Spread this initial dosage out over the course of 10 days.

** Add as regularly as possible. If one day is missed, double the daily dosage the next day.

Dosage rates will vary with flow rates, retention times and system variations. The rates above are for a typical, well-maintained system.

Activated Sludge Systems – Activated Sludge Systems include various process flow sheets: e.g. extended aeration, contact stabilization, step aeration, oxygen activated sludge.

The application rate for all products is based on the average daily flow rate to the aeration basin, excluding the return sludge stream.

Trickling Filter and Rotating Biological Contactors –

The application rate for all products is based on the average daily flow rate to the filter or contactor, excluding any recirculating process stream.

Lagoon Systems –

- **Aerated systems** – application rate is based on the average flow rate to the lagoon.

- **Facultative systems** – application rate is based on the lagoon surface area:

Day 1-5	20 kg/10,000m ² /day
Day 6+	2 kg/10,000m ² /week

- **Anaerobic systems** – Application rate is based on the total volume of the anaerobic lagoon:

<200,000 L	1 kg – 2x/week/10,000L
>200,000 L	0.5 kg – 1x/day/10,000L

- **Lagoons in cold climates** – commence program when the water temperature is at least 50°F (11°C).

For further information on application, contact your BIONETIX technical representative.