



## **PRODUCT DESCRIPTION – EnBac® B500**

### **Description**

EnBac® B500 is a powder containing a specially-formulated range of micro-organisms to biologically treat wastewater in Wastewater treatment plants (wwtp) receiving domestic sewage from homes, offices and businesses.

EnBac® B500 contains:

- High performance aerobic and facultative anaerobic micro-organisms
- Specific micro-nutrients for treating domestic sewage (including trace metals, vitamins, amino acids and metabolic stimulants)
- Macro- nutrients – essential to the balanced growth of the micro-organisms
- Bio-enhancer

### **How EnBac® B500 works**

The micro-organisms in EmBac® B500 will form a biomass within the treatment environment. The micro-organisms will then produce enzymes which go to work on the Fats, Oils and Greases (FOG) and the domestic sewage in the wastewater. They break down the fats, so that the fats don't get the chance to conglomerate, and the end products are CO<sub>2</sub> and H<sub>2</sub>O.

### **The Effects of Using EnBac® B500**

B500 enhances the organic removal efficiency of a treatment system. This reduces BOD, COD and TSS.

B500 reduces the accumulation of unsightly grease deposits, so increasing the efficiency of the treatment system and reducing maintenance costs.

B500 improves solids settling, where this may have been disturbed by loading fluctuation.

B500 accelerates the start-up of new systems and aids recovery after upsets.

Low temperatures may upset treatment systems. B500 helps to improve cold weather operation.

B500 reduces sludge production.

B500 controls flocculation by competing against filaments.

B500 significantly reduces odours in the treatment system's local environment.

### **Dosage Rate for Treatment Plants**

<u>Flow Rate</u>		<u>Initial Dose</u>	<u>Maintenance Dose</u>
Up to 10 m <sup>3</sup> /day	0.1 lps	0.5kg pd x 3 days	0.5kg per week
Up to 50 m <sup>3</sup> /day	0.5 lps	1.5kg pd x 3 days	1kg per week
Up to 200 m <sup>3</sup> /day	2 lps	5kg*	1.5kg per week
Up to 400 m <sup>3</sup> /day	5 lps	8kg*	2kg per week
Up to 2000 m <sup>3</sup> /day	25 lps	15kg*	0.25kg per day
Up to 4000 m <sup>3</sup> /day	50 lps	25kg*	0.5kg per day
Up to 8000 m <sup>3</sup> /day	100 lps	50kg*	1kg per day
Up to 40,000 m <sup>3</sup> /day	500 lps	50kg per 100 lps*	1kg per 100 lps per day
Up to 100,000 m <sup>3</sup> /day	1200 lps	50kg per 100 lps*	0.75kg per 100 lps per day
Up to 800,000 m <sup>3</sup> /day	10,000 lps	30kg per 100 lps*	0.5kg per 100 lps per day

\*Spread Initial dose equally over 10 days

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

### **Dosage Rates for Activated Sludge Systems**

For various processes including Extended Aeration Processes, Contact Stabilisation, Step Aeration and Oxygen Activated Sludge Systems, use the above table to calculate the correct dosage rate based on the average daily flow to the aeration basin, *excluding* the return sludge stream. If the flowrate is not regular due to seasonal or other reasons, please contact your Distributor or us for advice.

### **Dosage Rates for Trickling Filter and Rotating Batch Contactors (RBCs)**

Use the above table to calculate the correct dosage rate based on the average daily flow to the filter or contactor, *excluding* the recirculated stream. If the flowrate is not regular due to seasonal or other reasons, please contact your Distributor or us for advice.

### **Dosage Rates for Lagoons**

These vary depending on the design of the lagoon:

#### *Aerated Lagoon Systems*

Use the above table to calculate the correct dosage rate based on the average daily flow into the lagoon.

#### *Faculative Lagoon Systems*

The dosage rate is calculated according to the lagoon's surface area:

Day 1,2 and 3                      20kg per 10,000 square metres

Day 4+                                2kg per 10,000 square metres

#### *Anaerobic Lagoons*

The dosage rate is calculated according to the lagoon's total volume:

<200,000 litres                      1kg – 2x per week, per 10,000 litres

>200,000 litres                      0.5kg – per day, per 10,000 litres

#### *Cold Climate Lagoons*

Commence the treatment when water temperature is at least 11° C.

### **Packaging**

40 x 250g watersoluble sachets. 10kg per plastic bucket.

### **Storage**

Avoid storage below freezing and above 38°C. Keep product dry. Do not use on food contact surfaces. Avoid contamination of food during use and storage.

### **Safety**

Avoid inhaling dust. Do not ingest product. If product is swallowed, do not induce vomiting. Give water to dilute product in stomach. Wash hands after using product. Eye contact may cause irritation. Flush with water for at least 15 minutes. See MSDS for additional information.

*The information presented in this data sheet is believed to be reliable. This information is provided as representative only and there are no warranties, expressed or implied, regarding its performance. Since neither manufacturer nor distributor has any control over handling, storage, use and application conditions, neither manufacturer nor distributor shall be responsible for loss, damage or expense arising out of, or in any way connected with, the handling, storage or use of the product described.*

Bio-Systems Corporation Ltd  
Unit F1, Kings Drive  
Kingmoor Park South  
Carlisle  
CA6 4RD

Telephone: +44 (0)1228 522255

email: [office@biosystemsbio.com](mailto:office@biosystemsbio.com)