

# PRODUCT TECHNICAL SPEC SHEET



## WASTEWATER BIOAUGMENTATION

# DIGESTER BIOBLOCK

Digester Bioblocks have been specifically formulated to be used as controlled release technology in wastewater systems to boost performance, by improving effluent, odour and sludge parameters. A slow release block containing floc forming *Bacillus* with strong heterotrophic growth properties. Ideal for organic rich effluents such as municipal, dairy and slaughterhouse effluents. Diverse hydrolytic enzyme profiles give wide substrate specificity for the degradation of both animal and plant products. The presence of secondary metabolite clusters encoding for biosurfactants allows *Bacillus* to degrade FOG completely. *Bacillus* are able to retain themselves within the system via formation of flocs with excellent settling properties.

### PRODUCT SPECIFICATION

- Pack Size: 5kg and 15kg
- Count: 5E+9 CFU/g *Bacillus*
- Floc: Expect SVI around or below 100 under optimal conditions
- Appearance: Solid Block Shelf life 24 months
- Continuous dosing for between 60 and 90 days
- 5kg BioBlock for treatment of up to 1,5 million LPD
- 15kg BioBlock for treatment above 1,5 million LPD
- Enzyme profile: Production of Cellulase, lipase, protease, amylase, xylanase enzymes and more

### APPLICATIONS

- Municipal and industrial wastewater plants
- Lift stations and wet wells .)
- Ponds, lagoons and other large body systems
- Suited to effluents rich in organic materials
- Tackling FOG related filamentous issues such as *Nocardia* or *Microthrix* bulking and foaming.
- Reduction in sludge volume and malodours

### DIRECTIONS FOR USE

- Remove from packaging
- Attach to rope suspended from an eye bolt
- Suspend directly into the lift station below liquid surface
- Inspect monthly for degradation and change out when needed

### ENVIRONMENTAL CONDITIONS

- Salinity: Can be used in a wide range of water types from freshwater to seawater (no impact upon performance between 0 - 50 g/L)
- pH: pH 4 – to pH 10
- Temperature: 8 °C – 46°C
- Effluent type : Organic rich (Protein, FOG, carbohydrates containing effluents such as municipal, dairy, slaughterhouse etc.)

### PARAMETER VALUE

- Y (gDW/gBOD) 0.543
- Q<sub>max</sub> (gBOD/gVSS/day) 27.000
- U<sub>max</sub> (per day) 14.661

The kinetic parameters of the *Bacillus* consortium in Digester Bioblock under optimal municipal wastewater conditions at pH 7 and 21°C. Please note performance may vary under operating conditions due to biological and physiochemical influences.