



BCP55™
Starch Degradation

BCP55™ CONTAINS SPECIAL BACTERIAL BLEND THAT DEGRADES STARCH

BIOAUGMENTATION WITH BCP55™ CAN:

- Reduce BOD and TSS concentrations and unpleasant odors
- Increase wastewater treatment efficiency
- Lower foam
- Help start-ups in new plants
- Reseed after plant upset

IMPROVE THE EFFLUENT QUALITY OF YOUR STARCH PRODUCING PLANT

Starch and cellulose are natural polysaccharides, produced by plants as their energy reserve. Main industries that process cereals, grains, potatoes, etc. usually have high starch and cellulose contents in the influent wastewater. These complex molecules create serious issues in wastewater treatment plants due to their low biodegradability.

Wastewater from starch factories has a high organic matter load. Our mix of aerobic and facultative anaerobic bacteria help to degrade this organic matter. Bioaugmentation with BCP55™ will provide specially selected microorganisms that are high amylase and cellulase producers. Cellulase enzymes degrade cellulose, while amylase enzymes degrade starch molecules.

SPECIFICATIONS

Description:	Beige free flowing powder with black and white granules
Packaging:	Bulk, water soluble pouches (200 x 56g, 400 x 28g, 40 x 250g)
Bulk Density:	0.50– 0.70 g/cm ³
Stability:	Max. loss of 1 log/yr
pH (1% Solution):	6.0-7.5
Nutrient Content:	Biological nutrients and stimulants
Enzymes Present:	Amylase, cellulase, lipase, protease
Bacteria Count:	5 billion CFU/g
Storage and Handling:	DO NOT FREEZE! Store in a cool dry location. Do not inhale dust. Avoid contact with eyes. See MSDS. Bionetix will not be held responsible for quality issues after 6 months of storage.

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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*	1 kg/100 L/sec/day
Up to 10,000 L/sec	50 kg/100 L/sec*	1 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 processes: 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/10,000m2/day
Day 6+	2 kg/10,000m2/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 11°C (55°F). For further information about application, contact your Bionetix® technical representative.