

Bio-STAR™ Munibac+

Treatment of municipal wastewater

BIO-STAR Munibac+ is a bio-enzymatic solution designed specifically for municipal wastewater treatment, both within sewer collection systems and at treatment facilities. Its advanced formulation enhances the liquefaction and degradation, of various fats, oils and grease (FOG), effectively reducing BOD, COD, suspended solids, and undesirable odors.

Bio-STAR Munibac+ is engineered with a blend of bacterial cultures meticulously selected for municipal wastewater treatment applications. This product offers a dependable solution designed to maintain optimal biomass stability and activity. Bio-STAR Munibac+ effectively addresses problematic compounds—including FOG, surfactants, soaps, fatty acids, and various household chemicals—that may disrupt the performance of municipal wastewater treatment facilities.

In addition to effectively eliminating recalcitrant organic matter, Bio-STAR Munibac+ incorporates specialized strains designed to enhance floc density and decrease water retention within biological solids. This reduction in sludge volume consequently minimizes accumulation in lagoons or digesters designated for disposal.



FEATURES

- Contains vegetative and spore-forming bacteria.
- Rapid germination and superior bacterial growth.
- High extracellular enzymatic capacity.
- Effective in aerobic, facultative, and anaerobic metabolic processes.

Bio-STAR™ Munibac+

BENEFITS

In Collection system	At Wastewater Treatment plant
Reduces BOD/COD upstream of the wastewater treatment plant	Eliminates FOG and surface scum
Eliminates problems related to crown corrosion	Reduces significantly BOD, COD and ammonia
Reduces the frequency of maintenance of collection system and pumping stations	Reduces the volume of sludge generated
Reduces or eliminates bad odors	Improves overall treatment and reduces the impact of shock load
Degrades FOG	Improves settling and reduces the need for flocculant
	Allows for rapid biomass recovery following a shock

PRODUCT CHARACTERISTICS

Bacterial count	5 x 10 ⁹ cfu/gram
Bacteria types	Bacillus and Pseudomonas
Biological pathways	Aerobic and facultative anaerobic
pH range	5.5 – 9.0 (optimal 6.5-8.0)
Temperature range	5°C – 45°C (optimal 20°C-35°C)
Appearance	Tan powder with black particles
Shelf life	2 years

Safety

Bio-STAR Munibac+ contains natural, non-genetically modified bacteria that have undergone rigorous antibiotic resistance testing. Simple hygiene practices are recommended during use. Do not ingest this product. Avoid contact with eyes and skin. Wash hands with soap and water after each use. Avoid situations that promote dust accumulation in confined spaces. Some people may be sensitive to the chemical compounds in this product. If irritation occurs, avoid direct skin contact.

Storage

Store in a cool, dry place. Avoid extreme temperatures and excessive humidity. Products exposed to temperatures above 45°C or below 0°C for extended periods may be damaged.