



MICROPLEX® UASB

Enhancing Nature's Science

Product Characteristics

Derived From:

Facultative anaerobic microbial strains, buffering salts, trace nutrients.

Physical Properties:

Appearance: Tan

Form: Granular powder

Nominal Microbe Count: Formulated to contain > 7 x 10⁸/gram

Packaging: 25 lb (11.3 kg) plastic pails, 220 lb (100 kg) fiber drums

Caution:

Avoid inhalation of dry powder or liquid mist. Avoid exposing skin to dry powder or strong solution as irritation may result. If material contacts skin or eyes, flush thoroughly and repeatedly with water.

Storage and Disposal:

Keep product in original container. Store in dry area at 45°F to 105°F (7°C to 40°C). Do Not Freeze. Do not transfer into food or drink containers. Wash with soap and triple rinse when empty for recycling. Always dispose of container in accordance with local, state, and/or federal regulations.

Shelf Life:

5 years when properly stored.

Conditions of Sale:

The information contained in this bulletin is believed to be accurate and reliable. Buyer and user acknowledge and assume all liability resulting from the use of this material. Follow directions carefully. Timing, method of application, weather, and other factors are beyond the control of the seller.

For Anaerobic Digestion of Wastewater, In Particular UASB and EGSB Bioreactors (Dry)

MICROPLEX® UASB is a dry granular powder of preselected and adapted facultative anaerobic microbial strains, specifically chosen for their ability to anaerobically degrade high BOD/COD wastewater. MICROPLEX® UASB is formulated to enhance the degradation of BOD/COD under toxic, inhibitory, or cold weather conditions and specifically to reseed systems, maintain gas production, and limit volatile fatty acids (VFA) buildup. MICROPLEX® UASB has been developed for upflow anaerobic sludge blanket (UASB) or expanded granular sludge bed (EGSB) anaerobic bioreactors. MICROPLEX® UASB has been developed for use in the pulp and paper, chemical, food processing, petroleum refining, textile, and related industries and for use in municipal plants receiving concentrated waste streams.

Benefits of Use:

- Reseed existing or seed new UASB or EGSB anaerobic digesters
- Restore microbial activity in damaged systems
- Resolve uncoupling, reducing VFA build-up
- Reduce grease blanket build-up
- Improve stability and gas production through key micronutrient addition
- Improve biomass settling—reduce effluent suspended solids
- Improve overall system performance

Application:

Contents are highly concentrated. MICROPLEX® UASB must be mixed with warm water and then applied directly into the wastewater flow as it enters the reactor. Contact your local PROBIOTIC SOLUTIONS® representative for dosing rates and recommended application. Dosing is dependent on both wastewater flow and concentration; therefore, a range of potential doses is provided.

APPLICATION	Minimum Dose per MGD (1,000 m ³ /day)	Maximum Dose per MGD (1,000 m ³ /day)
Normal/Maintenance	2 lb (0.20 kg)	up to 5 lb (0.50 kg)
Start-Up/Upset (for 10 days min.)	up to 35 lb (3.0 kg)	up to 87.5 lb (7.5 kg)
Severe Upset	up to 52.5 lb (4.5 kg)	up to 131.25 lb (11.25 kg)

CONDITION	Ranges	Optimum
Water pH	6–9	7
Temperature °F (°C)	50–104 (10–40)	95 (35)
Toxic heavy metals, ppm	Trace	None