

MEET FLOOR-MATE®

Soil-derived microbes and metabolites naturally break down the proteins, salts, and other materials found in urine and fecal matter that cause unpleasant odors such as ammonia.

By competitive exclusion, Floor-Mate® reduces the pathogen load.

Use in livestock pens, barns, horse stalls, and anywhere else animals are held.



ACTIVE INGREDIENTS

LIQUID FERMENTATION PRODUCTS OF:

Bacillus licheniformis 6.0 million CFU/ml (CFU/g)
Bacillus amyloliquefaciens 4.0 million CFU/ml (CFU/g)
Bacillus pumilus 2.0 million CFU/ml (CFU/g)
Bacillus subtilis 2.0 million CFU/ml (CFU/g)
Streptomyces griseus 0.2 million CFU/ml (CFU/g)

0.06% humic acids derived from leonardite

WHAT IS COMPETITIVE EXCLUSION?

This category is based upon the principal of limiting the available space for pathogenic bacteria to settle because the space is already taken up by beneficial bacteria. This results in less incidence of illness from *Salmonella*, *E. coli*, etc.

Competitive exclusion is also attributed with the reduction of morbidity and mortality among other detrimental health factors in Poultry production systems.

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THE SCIENCE BEHIND BIO S.I. FLOOR-MATE®

Bio S.I. Floor-Mate® contains a proprietary blend of several *Bacillus* species. *Bacillus* species are gram positive bacteria, form endospores in the environment, and are resistant to radiation, desiccation, high temperatures, chemical disinfectants, and nutrient stress. This provides a competitive advantage over many gram-negative non-endospore forming bacteria, sensitive to environmental stress, such as: *Escherichia coli*, *Fusobacterium necrophorum*, and *Dichelobacter nodosus*.

MICROBIAL SPECIES	PROFILE IN THE SOIL ENVIRONMENT	*MODE OF ACTION
<i>Anthrobacter globiformis</i>	Persists in the soil environment	Biodegrades diverse types of pollutants.
<i>Bacillus species</i>	Resistant to environmental stress; persists for decades	Secretes metabolites that prevent pathogen infection.
<i>Pseudomonas species</i>	Adapts to environmental stress	Produces metabolites that act as antibiotics; competes aggressively with other microorganisms.
<i>Streptomyces griseoflavus</i>	Persists in the soil environment	Actively produces antibiotics; excellent agents for controlling various fungal & bacterial pathogens.
<i>Enterococcus faecalis</i>	Resistant to environmental stress	Produces antimicrobial compounds; acts as probiotic to prevent diarrhea & improve animal health.

*based on peer reviewed publications

APPLICATION RATES

Use	First Application	Maintenance Application
Poultry Houses	4 gallons/25,000 ft added to spray solution; spray evenly over bare floor & litter	1 gallon/25,000 ft , weekly
Horse Stalls & Show Animals	16 fl. oz./500 ft (roughly 10 stalls); spray evenly over floor/bedding and walls, taking care to treat around troughs & watering vessels	8 fl. oz./1,000 ft (roughly 10 stalls), weekly
Confined Animals	Surface treatment: 16 fl. oz./500 ft ; spray evenly over floor, bedding, slats, and walls Wash-down water: Mix 2 gallons into wash-down water	Surface treatment: 8 fl. oz./1,000 ft ; spray evenly over floor, bedding, slats and walls, weekly Wash-down water: Mix 1 gallon into wash-down water, weekly
Arenas	Contact your Bio S.I. representative to discuss Bio S.I.'s Arena Program	
Shallow Pits	1 quart/1,000 gallons of storage of flush pan or pit	1 quart/1,000 gallons of storage of flush pan or pit
Deep Pit Livestock Facilities	1 gallon/30,000 gallons	1 gallon/30,000 gallons
Large Lagoons	1 gallon/75,000-100,000 gallons	1 gallon/75,000-100,000 gallon

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