

mother ferment™

Biology-Aligned Cleaning for Animal Environments

THE PROBLEM, THE SCIENCE & THE PERFORMANCE

The Hidden Risk in “Clean” Animal Facilities

Most equestrian facilities, shelters, and boarding environments rely on cleaning products that:

Release **VOCs (volatile organic compounds)** → causing respiratory stress

Use **petroleum or palm-derived surfactants** → disrupting skin and microbiomes

Contain **endocrine-disrupting residues**

Clean surfaces—but leave behind **biofilms and contamination structures**

Result:

Persistent odors, reinfection cycles, skin irritation, respiratory issues, and stressed animals.

The mother ferment™ Difference

Mother Ferment™ is a **fermentation-engineered cleaning system** designed to outperform both synthetic and plant-based cleaners.

Certified & Proven

- EPA Category IV (Practically Non-Toxic)
- Food-contact surface safe (FDA-aligned)
- Green Seal Certified
- ASTM E4488 A5: **96% cleaning efficacy**
- USP <51>: **Self-preserving with no added preservatives**
- Removes contamination at the **structural level**, not just the surface.

Built for Animal Biology

- No VOCs
- No endocrine disruptors
- No petrochemical residues
- No synthetic preservatives

Protects:

- Skin barrier
- Respiratory health

- Microbiome integrity

THE SCIENCE OF MOTHER FERMENT

Why Mother Ferment is a Superior Cleaner

Cleaning works because of surfactants—molecules that bind water and oil, break apart grease, and lift dirt so it can be rinsed away. They do the “heavy lifting” at a microscopic level by forming structures called micelles that trap and remove contaminants.

Mother ferment stands out because of how efficiently its biosurfactants work:

1. Faster Activation (Lower CMC)

Surfactants only work fully after reaching a threshold called the Critical Micelle Concentration (CMC).

Mother ferment activates at extremely low concentrations (0.00524%)

Compared to conventional surfactants:

- ~44× more efficient than SLS
 - ~4–19× more efficient than plant-based options
- This means it starts cleaning almost instantly and uses far less product.

2. Better Surface Coverage (Lower Surface Tension)

Effective cleaning requires liquid to spread instead of bead up.

Mother ferment reduces surface tension to ~23 mN/m, significantly lower than traditional systems. results:

- Faster spreading across surfaces
- Deeper penetration into pores and crevices
- More complete removal of grease and residue

3. Higher Cleaning Efficiency

Because it activates quickly and spreads better:

- Cleans faster and more thoroughly
- Requires less dwell time
- Uses less product per application
- Leaves less residue behind

Bottom Line

Mother ferment’s biosurfactant system works earlier, spreads further, and cleans deeper than conventional cleaners—making it a more efficient, high-performance, and lower-impact solution for environments like animal facilities.

PERFORMANCE, PEST CONTROL & APPLICATION

Biofilm Removal — The Root Cause Problem

Biofilms are responsible for:

- Persistent odors
- Pathogen survival
- Recontamination

Mother Ferment™ Solution:

- Penetrates biofilm structure
- Breaks down microbial matrix
- Enables complete removal

Result:

Eliminates what keeps coming back.

Natural Pest Pressure Reduction

Mother Ferment™ biosurfactants:

- Disrupt insect lipid cuticle
- Cause dehydration

Reduce lifecycle of:

- Fleas
- Stable flies
- Odor-causing pests

No neurotoxins. No resistance. No harm to animals.

Why Facilities Switch

Health Benefits

- Reduced respiratory irritation
- Improved skin and coat health
- Lower animal stress

Operational Benefits

- No harsh chemical handling
- Reduced PPE requirements
- Multi-surface use

Performance Advantage

- Up to 44 x more efficient than harsh chemical cleaners
- 96% ASTM cleaning efficacy
- Self-preserving system (USP <51>)
- Certified safer chemistry (Green Seal)

Applications

Equestrian

- Stalls
- Bedding areas
- Tack rooms
- Trailers

Shelters & Rescues

- Kennels
- Intake areas
- Recovery zones

Boarding Facilities

- Runs
- Play areas
- Grooming stations

Veterinary Environments

- Exam rooms
- Recovery areas
- General sanitation
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COMPETITOR COMPARISON

Feature	Bleach	Quats	Chlorhexidine	Green Cleaners	Mother Ferment™
Cleaning Power	High	Medium	Medium	Low–Medium	High (96%)
Toxicity	High	Moderate	Moderate	Low	Practically Non-Toxic
VOCs	Yes	Yes	Some	Sometimes	None
Residue	Yes	Yes	Yes	Yes	Minimal

Feature	Bleach	Quats	Chlorhexidine	Green Cleaners	Mother Ferment™
Biofilm Removal	Poor	Moderate	Moderate	Poor	Strong
Skin Safety	Irritating	Irritating	Variable	Better	Excellent
Respiratory Impact	High	Moderate	Moderate	Low	None
Preservatives	N/A	Yes	Yes	Yes	None
Mechanism	Oxidation	Chemical disruption	Antimicrobial	Mild surfactant	Biosurfactant + fermentation

VETERINARY VALIDATION SUMMARY

Formulation Profile

- Fermentation-derived biosurfactants
- No VOCs
- No endocrine disruptors
- No petrochemical surfactants
- No added preservatives

Safety Profile

- EPA Category IV
- Suitable for continuous exposure
- Low dermal irritation risk
- Fragrance free version has no respiratory irritants

Microbiological Impact

- Removes organic contamination
- Disrupts biofilms
- Avoids harsh sterilization effects

Animal Health Relevance

- Protects respiratory systems
- Reduces dermal irritation
- Supports microbiome balance
- Animals live in constant contact with the surfaces you clean.
- What you clean with becomes part of their biology.