

# Pro Dairy Max™

## PDM

Probiotic Dairy Cattle Feed Supplement

# TECHNICAL DATA SHEET

BioSphere AgriTech

## PRODUCT OVERVIEW

**BioSphere AgriTech Pro Dairy Max™** is a dairy cattle feed supplement that combines beneficial probiotic microbes with carefully selected biotic enhancing supplements to enhance cattle digestion, nutrient absorption, and overall health. When properly utilized, BioSphere PDM can increase milk production through improved digestive efficiency and reduce the potential for infection or disease by strengthening immune functionality in dairy cattle.

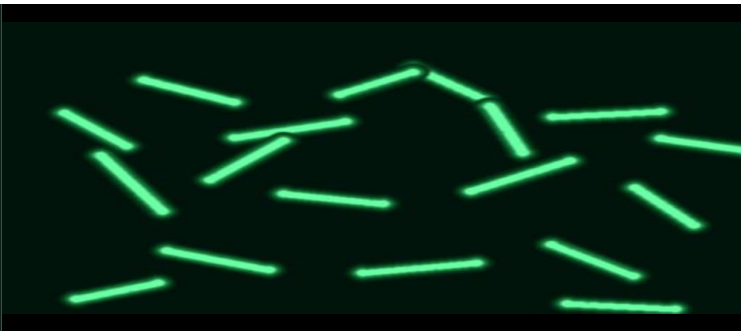
**BioSphere PDM can be administered** through various methods, including water troughs, as a feed additive, or by oral drench.

## MICROBIAL SPECIFICATIONS & KEY BENEFITS

ACTIVE ORGANISMS	CONCENTRATION
<i>Bacillus Mucilaginosus</i>	$5.8 \times 10^7$ cfu/g
<i>Bacillus Subtilis</i>	$2.1 \times 10^9$ cfu/g
<i>Bacillus Megaterium</i>	$6.1 \times 10^7$ cfu/g
<i>Bacillus Licheniformis</i>	$6.1 \times 10^7$ cfu/g
<i>Bacillus Simplex</i>	$6.1 \times 10^7$ cfu/g
<i>Paenibacillus Polymyxa</i>	$5.1 \times 10^9$ cfu/g
<i>Azobacter Chroococcum</i>	$1.0 \times 10^9$ cfu/g
<i>Pseudomonas Fluorescens</i>	$9.0 \times 10^7$ cfu/g
<i>Lactobacillus Acidophilus</i>	$3.2 \times 10^9$ cfu/g
Amino Acids	<b>4.5%</b>
Appearance	<b>Fine white powder</b>
Solubility	<b>100% in water</b>




#	KEY BENEFITS
1	Enhances microbial diversity in the cattle gut, promoting a balanced microbiome
2	Supports healthy digestion and improved nutrient absorption
3	Optimizes feed efficiency, improving the feed-to-milk conversion ratio
4	Boosts immune response to better combat disease and infection
5	Increases milk production through improved digestive and metabolic efficiency
6	Improves milk quality — higher butterfat and protein content
7	Ideal for both organic and conventional dairy production operations
8	Supports optimal calcium and phosphorus utilization for milk synthesis
9	Reduces somatic cell count (SCC) and promotes udder health
10	Improves colostrum quality and immune transfer to newborn calves

**BIOLOGICAL  
ACTIVE  
ORGANISMS**







*Fluorescence microscopy*  
**Bacillus spp. & Lactobacillus Acidophilus**  
Active probiotic organisms present in BioSphere PDM at up to  $3.2 \times 10^9$  cfu/g

**DIRECTIONS FOR USE**

 <b>Water Trough</b>	 <b>Feed Additive</b>	 <b>Oral Drench</b>
<p><b>1.</b> Dissolve BioSphere PDM in water at 0.003 g per pound of live weight per head.</p>	<p><b>1.</b> Mix BioSphere PDM directly into feed at 0.003 g per pound of live body weight.</p>	<p><b>1.</b> Wet 0.003 g per pound of live body weight in 30 mL of water.</p>
<p><b>2.</b> Mix thoroughly to ensure even distribution.</p>	<p><b>2.</b> Wet the powder with minimal water and spray evenly over the feed using a spray nozzle.</p>	<p><b>2.</b> Administer as an oral drench as needed.</p>
<p><b>3.</b> Treat troughs weekly to maintain microbial availability.</p>	<p><b>3.</b> Turn the feed over to evenly disperse BioSphere PDM throughout.</p>	<p><b>3.</b> Use during receiving or weaning of cattle to maximize effectiveness.</p>
<p><b>4.</b> Note: Cattle drink ~7 gal/100 lbs. Account for herd size and trough volume when dosing.</p>	<p><b>4.</b> Apply weekly to support ongoing microbial activity in the gut.</p>	
<p><b>5.</b> You cannot overdose BioSphere PDM — maximize cost-benefit when applying.</p>		
<p><b>6.</b> If an auto-float is installed, consider turning it off while product is in the trough.</p>		

**RECOMMENDED APPLICATION RATES**

 <b>Weaning &amp; High Stress</b>	 <b>Lactating Cows</b>	 <b>Transition &amp; Dry Cows</b>
<p>Weekly Dose: <b>0.006 g / 1b live weight / head</b></p>	<p>Weekly Dose: <b>0.003 g / 1b live weight / head</b></p>	<p>Weekly Dose: <b>0.003 g / 1b live weight / head</b></p>
<p><i>Double dose during weaning, illness recovery, or high-stress periods for additional microbial support.</i></p>	<p><i>Supports nutrient demands of lactation, improves milk quality and yield.</i></p>	<p><i>Begin 3 weeks pre-calving. Supports colostrum quality and prepares the cow for peak milk demand.</i></p>

 **Storage:** Store BioSphere PDM in a cool, dry place. Keep tightly sealed and avoid direct sunlight.