



Manure Master™ Plus-PA

A manure treatment blend that accelerates manure liquefaction & enhances its nutrient value

Manure Master Plus-PA provides technology to enhance liquid manure management including storage, handling, application, soil health, crop response and environmental safety.

Manure Master Plus-PA can help enhance manure digestion and liquefaction, reduce barn and field odors, reduce top crusting and bottom solids, enhance soil health and crop performance, reduce pest pressure and improve nutrient retention.

INGREDIENTS: Natural blend of organic nutrients, essential elements and a blend of digestive microbes.

TREATMENT PROTOCOL:

For one million gallons of manure, use 40 gallons of **Manure Master Plus-PA** on an annual basis:

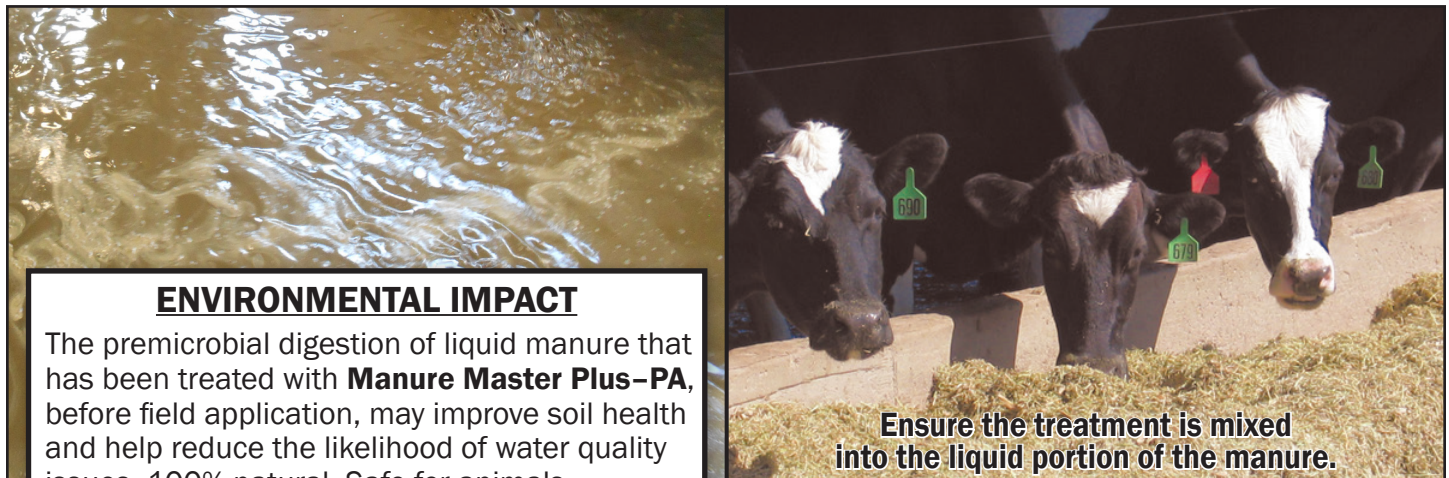
- After major pump-out or at the start of treatment: 15 gallons (inoculation rate)
- Treatment should occur 2 to 3 weeks after either the fall or spring pump-out, when pit/lagoon will be at its lowest capacity and fresh manure has accumulated.
- Scheduled 10 monthly treatments: 2.5 gallons/month (25 gallons total)

Treatment for 350,000 to 400,000 gallons (1,000 to 1,200 head swine barn) **manure pit**, use 15 gallons of **Manure Master Plus-PA** on an annual basis:

- After major pump-out or at the start of treatment: 5 gallons (inoculation rate)
- Scheduled 10 monthly treatments: 1.0 gallon/month (10 gallons total)

NOTE: **Manure Master Plus-PA** will help reduce pit methane foam, but may not eliminate it completely in all cases. Apply **Manure Master FoamAway** to methane foam.

Manure Master Plus-PA is available in five gallon containers. Easy to apply.



ENVIRONMENTAL IMPACT

The premicrobial digestion of liquid manure that has been treated with **Manure Master Plus-PA**, before field application, may improve soil health and help reduce the likelihood of water quality issues. 100% natural. Safe for animals.

Ensure the treatment is mixed into the liquid portion of the manure.

Keep Out of Reach of Children

Manure Master Plus-PA is available in five gallon containers. Easy to apply.

Made in the U.S.A.

For more information, call **507-373-2550** or visit manuremaster.com



Manure Master™ Plus-Pit Accelerator



More from Every Acre, Animal & Gallon of Manure

Manure Master™ Plus-PA

A liquid manure enhancement technology

The predominant organisms in **Manure Master Plus-PA** manure technology are the purple sulfur group. This bacteria consortium is divided between two major categories: purple sulfur and purple non-sulfur organisms. The purple sulfur bacteria (which includes *Thiobacillus* sp.) utilizes hydrogen sulfide as an electron donor and oxidizes the sulfide to elemental sulfur, which is temporarily stored intracellularly and released as sulfate.

Manure Master Plus PA technology incorporates a vast diversity of microorganisms to achieve an effective and natural biological solution to manure management problems.

Manure Master Plus-PA's consortium of purple sulfur, non sulfur, heterotrophic, phototrophic and autotrophic cultures are proven to reduce gas-generating reactions that result in carbon dioxide emissions via dark phase, light independent microbial processes. This novel technology resolves most, if not all, manure storage problems within barn environments and reduces land-applied manure odor, improves nitrogen retention and helps control runoff, which results in improved nutrient management as well as enhanced soil and crop benefits.

Manure Master Plus-PA

A Wide Consortium of Beneficial Microbes with Diverse Functions

- *Rhodopseudomonas palustris*
- *Pseudomonas citronellolis*
- *Desulfovibrio aminophilus*
- *Desulfovibrio vulgaris*
- *Clostridium butyricum*
- *Pleomorphomonas oryzae*
- *Enterobacter asburiae*
- *Wolinella succinogenes*
- *Methanomethylovorans hollandica*
- *Bacillus amyloliquefaciens*
- *Bacillus subtilis*
- *Bacillus licheniformis*
- *Bacillus megaterium*

Manure Master Plus-PA Benefits

- Odor reduction – barn, pit and field
- Pit liquefaction
- Solids reduction – surface crust and bottom solids
- Ease of waste removal – less agitation required
- Consistent nutrient levels top to bottom in the pit or lagoon
- Nutrient retention in microbial biomass
- Reduced odor attracts fewer insect pests
- Promotes animal growth as a result of improved environment
- Increased weight gain through improved feed conversion
- Mortality reduction as a result of improved health
- Eliminates field streaking due to poor liquefaction and consistency
- Improves biological activity in soil to enhance root and crop growth