

AMMONIA REDUCTION BLEND CHM-AMRB-5B

PRODUCT DESCRIPTION:

CMH-AMRB-5B is a concentrated, dry blend of stabilized bacterial spores and micronutrients formulated for ammonia reduction

ADVANTAGES

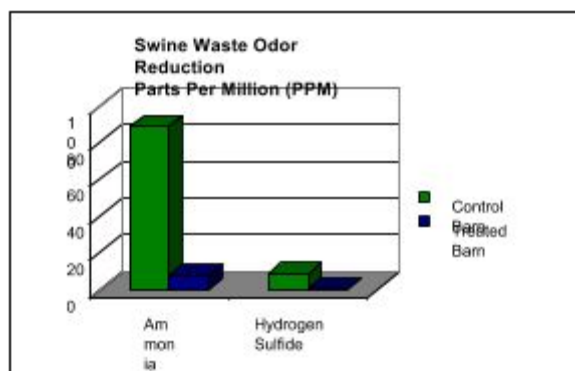
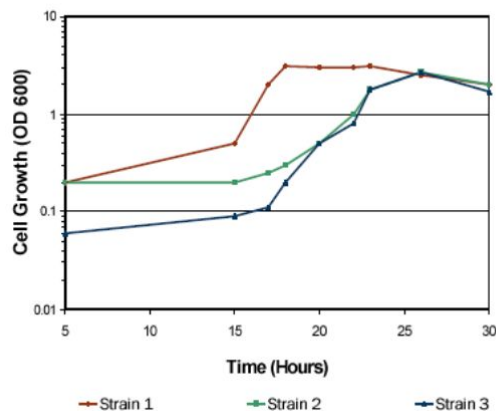
High ammonia concentrations cause problems in many industries such as wastewater treatment, aquaculture, and animal waste treatment. To address this issue Chemtech and its business partner's scientists in the Bio-Tech field have set out to isolate strains to deal with these excessively high ammonia levels.

For this research replicate flasks of sterile media consisting of basal salts, glucose, and ammonia were inoculated with different strains of bacteria. The flasks were placed on an incubated shaker, and bacterial growth was monitored over a thirty-hour period. An increase in growth is indicative of the ability to utilize ammonia for cell growth. As demonstrated in the graph below, our bacteria have the ability to utilize ammonia.

After screening over 300 strains of bacteria, the best ammonia degraders were combined to form Chemtech's Ammonia Reduction Blend. This blend was further tested for the ability to reduce ammonia in swine barns. One barn was treated with our scientifically selected bacterial cultures and the other barn was left untreated for comparison. After 6 weeks of treatment, the ammonia and hydrogen sulfide levels were compared between the two barns after

As is shown in the graph below, Chemtech's Ammonia Reduction Blend significantly reduced the ammonia level in the treated barn as well as the hydrogen sulfide level.

Growth of our Microbes on Ammonia



APPLICATIONS

- Waste water treatment
- Animal waste treatment
- Aquaculture

PRODUCT PROFILE

These bacteria are stabilized to ensure long-term stability and extended shelf-life

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| <ul style="list-style-type: none">● <u>Multiple <i>Bacillus</i> Species</u>● ** <i>Bacillus Licheniformis</i>● ** <i>Bacillus Megaterium</i>● ** <i>Bacillus Subtilis</i> | <ul style="list-style-type: none">● Naturally occurring, non-engineered● Aerobes and facultative anaerobes● Highly motile● Positive chemotaxis● 100% stabilized bacterial spores |
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CHM-AMRB-5B: Ammonia Reduction Blend Specifications

Minimum Bacterial Concentration:
5 billion CFU/gram (2.25 Trillion CFU/pound)

TYPICAL PROPERTIES

Appearance.....dry, tan, free-flowing powder.
Shelf Life.....one year from the date of manufacture

PERFORMANCE PROPERTIES

Effective pH range.....5.0 - 10.0
Effective Temperature Range.....40 -130 degrees F (5 – 55 deg. C)
Bacterial Enzyme Production.....Amylase, Protease, Lipase,
Esterase, Urease, Cellulase, Xylanase, and a series of Hydrocarbon degrading enzymes

PACKAGING

One pound water soluble packets in 25 pound pails and bulk fiber drum.

STORAGE AND HANDLING

Storage.....Store in a cool, dry place
Handling.....Wash hands thoroughly with warm, soapy water after handling

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