



Agricultural Utilization Research Institute

MINNESOTA GROWN SOYBEAN MEAL FERTILIZER BLENDS FOR LAWN AND GARDEN

How did this project start?

- > Minnesota Soybean Research and Promotion Council (MSR&PC) contracted with the Agricultural Utilization Research Institute (AURI) to explore fertilizer uses for soybean meal in lawn and garden markets.
- > Three different versions of soybean meal fertilizers have been formulated with AminOrganix out of Bloomington, Minnesota (MN).
- > Two of the formulations include 50 percent soybean meal, and a third contains 25 percent soybean meal.

Proven, highly effective, and safe

- > AminOrganix products have been available since the early 1990s in Minnesota.
- > AminOrganix products are presently in 200 golf courses in Florida of which six are in the top ten.
- > AminOrganix products have been successfully used in the Southeast on peanuts, strawberries, corn, squash, and cucumbers.
- > All current AminOrganix products are made with natural feed-grade ingredients in a feed-grade certified manufacturing facility (Form-A-Feed, Inc.) in Minnesota.
- > People and animals can work and play immediately after application.

Soybean meal as a soil amendment and fertilizer for lawn & garden applications*

- > Soybean meal (SBM) is used by home gardeners as both a soil amendment and fertilizer.
- > SBM is available for purchase from a variety of retailers and online.
- > SBM is considered a natural fertilizer because it contains no synthetic nitrogen, phosphorus, or potassium.
- > One of the benefits of SBM is that it is very high in nitrogen (7%) for an organic fertilizer and is naturally a slow-release fertilizer.
- > SBM contains a variety of amino acids which act as growth stimulants for both roots and leaves.

AMINORGANIX
Sustainable Solutions for Growth

7-1-7
Organic Fertilizer
No nitrates, made to FDA feed grade standards
Soybean Meal content 50%

| Guaranteed Analysis | Defined Iron: |
|--|---------------|
| Total Nitrogen (N) | 7.00% |
| Available Phosphate (P2O5) | 1.00% |
| Soluble Phosph (P2O5) | 0.70% |
| Calcium (Ca) | 2.00% |
| Magnesium (Mg) | 0.30% |
| 0.1% Water Soluble Magnesium Sulfate (S) | 0.10% |
| 1.00% Calcium Sulfate (S) | 1.00% |
| 0.80% Iron Sulfate (S) | 0.80% |
| Cobalt (Co) | 0.005% |
| Manganese (Mn) | 0.20% |
| Zinc (Zn) | 0.10% |
| 0.1% Water Soluble Iron | 0.10% |
| Magnesium (Mg) | 0.25% |
| 0.1% Water Soluble Magnesium Sulfate (S) | 0.005% |
| Zinc (Zn) | 0.10% |
| 0.1% Water Soluble Zinc | 0.10% |

Guaranteed Irons:
Total Nitrogen (N) 7.00%
Available Phosphate (P2O5) 1.00%
Soluble Phosph (P2O5) 0.70%
Calcium (Ca) 2.00%
Magnesium (Mg) 0.30%
0.1% Water Soluble Magnesium Sulfate (S) 0.10%
1.00% Calcium Sulfate (S) 1.00%
0.80% Iron Sulfate (S) 0.80%
Cobalt (Co) 0.005%
Manganese (Mn) 0.20%
Zinc (Zn) 0.10%
0.1% Water Soluble Iron 0.10%
Magnesium (Mg) 0.25%
0.1% Water Soluble Magnesium Sulfate (S) 0.005%
Zinc (Zn) 0.10%
0.1% Water Soluble Zinc 0.10%

Lawn Fertilizer Project
sponsored by:
MINNESOTA SOYBEAN RESEARCH AND PROMOTION COUNCIL (MSR&PC)
SATISFACTION GUARANTEED

AMINORGANIX
Sustainable Solutions for Growth

16-0-8
Natural Based Fertilizer
No nitrates, made to FDA feed grade standards
Soybean Meal content 50%

| Guaranteed Analysis | Defined Iron: |
|--|---------------|
| Total Nitrogen (N) | 16.00% |
| 0.1% Water Soluble Magnesium Sulfate (S) | 0.10% |
| Available Phosphate (P2O5) | 0.00% |
| Soluble Phosph (P2O5) | 0.00% |
| Calcium (Ca) | 0.00% |
| Magnesium (Mg) | 0.25% |
| 0.1% Water Soluble Magnesium Sulfate (S) | 0.10% |
| 1.00% Calcium Sulfate (S) | 1.00% |
| 0.80% Iron Sulfate (S) | 0.80% |
| Cobalt (Co) | 0.005% |
| Manganese (Mn) | 0.20% |
| Zinc (Zn) | 0.10% |
| 0.1% Water Soluble Iron | 0.10% |
| Magnesium (Mg) | 0.25% |
| 0.1% Water Soluble Magnesium Sulfate (S) | 0.005% |
| Zinc (Zn) | 0.10% |
| 0.1% Water Soluble Zinc | 0.10% |

Guaranteed Irons:
Total Nitrogen (N) 16.00%
Available Phosphate (P2O5) 0.00%
Soluble Phosph (P2O5) 0.00%
Calcium (Ca) 0.00%
Magnesium (Mg) 0.25%
0.1% Water Soluble Magnesium Sulfate (S) 0.10%
1.00% Calcium Sulfate (S) 1.00%
0.80% Iron Sulfate (S) 0.80%
Cobalt (Co) 0.005%
Manganese (Mn) 0.20%
Zinc (Zn) 0.10%
0.1% Water Soluble Iron 0.10%
Magnesium (Mg) 0.25%
0.1% Water Soluble Magnesium Sulfate (S) 0.005%
Zinc (Zn) 0.10%
0.1% Water Soluble Zinc 0.10%

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AMINORGANIX
Sustainable Solutions for Growth

24-0-8
Natural Based Fertilizer
No nitrates, made to FDA feed grade standards
Soybean Meal content 25%

| Guaranteed Analysis | Defined Iron: |
|--|---------------|
| Total Nitrogen (N) | 24.00% |
| 0.1% Water Soluble Magnesium Sulfate (S) | 0.10% |
| Available Phosphate (P2O5) | 0.00% |
| Soluble Phosph (P2O5) | 0.00% |
| Calcium (Ca) | 0.00% |
| Magnesium (Mg) | 0.25% |
| 0.1% Water Soluble Magnesium Sulfate (S) | 0.10% |
| 1.00% Calcium Sulfate (S) | 1.00% |
| 0.80% Iron Sulfate (S) | 0.80% |
| Cobalt (Co) | 0.005% |
| Manganese (Mn) | 0.20% |
| Zinc (Zn) | 0.10% |
| 0.1% Water Soluble Iron | 0.10% |
| Magnesium (Mg) | 0.25% |
| 0.1% Water Soluble Magnesium Sulfate (S) | 0.005% |
| Zinc (Zn) | 0.10% |
| 0.1% Water Soluble Zinc | 0.10% |

Guaranteed Irons:
Total Nitrogen (N) 24.00%
Available Phosphate (P2O5) 0.00%
Soluble Phosph (P2O5) 0.00%
Calcium (Ca) 0.00%
Magnesium (Mg) 0.25%
0.1% Water Soluble Magnesium Sulfate (S) 0.10%
1.00% Calcium Sulfate (S) 1.00%
0.80% Iron Sulfate (S) 0.80%
Cobalt (Co) 0.005%
Manganese (Mn) 0.20%
Zinc (Zn) 0.10%
0.1% Water Soluble Iron 0.10%
Magnesium (Mg) 0.25%
0.1% Water Soluble Magnesium Sulfate (S) 0.005%
Zinc (Zn) 0.10%
0.1% Water Soluble Zinc 0.10%

Lawn and Garden Fertilizer Project
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SATISFACTION GUARANTEED



*This is a competitive product with other products in the same class.

MN grown, MN manufactured, and MN benefits to the lawn and garden sectors
Funded by the Minnesota Soybean Research & Promotion Council (MSR&PC)
in cooperation with the Agricultural Utilization Research Institute (AURI)

Listen to the SBM Fertilizer podcast episode at
auri.org/ag-innovation-news-podcast/