

Protein Crumbles® - Soil Food

Providing Nutritional Calories for Soil Microbes

Major Nutrient Analysis: 4-4-2

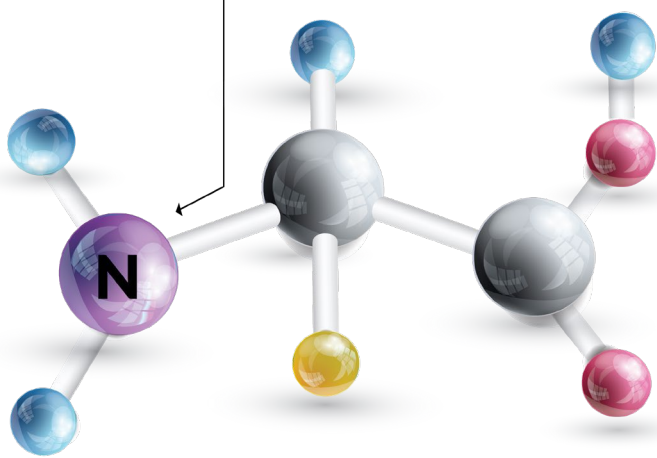
Protein Crumbles® is a granular protein amendment which functions through a diversity of Amino Acids. Amino Acids are the building blocks of all proteins and all life on Earth.

Protein Crumbles® is manufactured with a proprietary process that ensures the amendment is free of pathogens and contaminants often found in manures and other organic nitrogen inputs.



Amino Acid Molecular Structure

PART OF THE NITROGEN BUDGET OF PLANTS



Benefits of Protein Crumbles®

- Provides Nutritional Calories of Protein, Fat, and Carbohydrates that the beneficial microbes of the Soil Food Web can feed on
- Builds microbial biomass
- Increases crop yields
- Improves food nutrient density
- Provides Amino Acids which can be used by plants for Nitrogen uptake.
- Selected for low salt-index.
- Meets USDA NOP Standards
- Re-mineralizes the soil with essential minerals



Protein Crumblies® - Soil Food

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Guaranteed Analysis

Total Nitrogen	4.00%
0.40% Ammoniacal Nitrogen	
0.03% Nitrate Nitrogen	
1.50% Other Water Soluble Nitrogen	
2.07% Water Insoluble Nitrogen	
Available Phosphate (P ₂ O ₅)	4.00%
Soluble Potash (K ₂ O)	2.00%
Calcium (Ca)	7.000%
Magnesium (Mg)	0.700%
0.70% Water Soluble Magnesium (Mg)	
Sulfur (S)	1.50%

Weights and Measures

Bulk Density (pounds per cubic foot) = 39.8 lbs.*
.6 cubic foot bag = 27.86 lbs.*
1 cubic yard = 1075 lbs*

** Due to humidity and moisture fluctuations weights are approximate*

Derived from:

Heat-treated chicken manure from laying hens, Fish Protein, Elemental Sulfur

ALSO CONTAINS NON-PLANT FOOD INGREDIENTS

Soil Amending Ingredients:

- 5% Volcanic Ash

Directions for Use

DO NOT MIX INTO SOIL. Protein Crumblies is best applied as a top-dressing from the surface of the soil.

Seed Treatment:

Transplants, plugs, and seedlings
Lightly sprinkle on flats of seedlings

Lawn/Turf:

1 bag (.6cu.ft.) per 1000 to 2500 square feet
1 gallon pail (.12 cu.ft.) per 200 sq. ft.

Hydroseeding:

44 bags (.6 cubic foot bags) per acre
1 bag per 1000 sq. ft.

Agriculture:

Varies with the needs of the crop - using 750 to 2000 pounds/acre (1853 lbs/hectare to 4942 lbs/hectare)

Container Production:

Application frequency varies with cultivar, but typically only 1-2 applications per season is required.

Application rates are as follows:

- 4 in container: 1 teaspoon
- 1 gallon: 1 flat Tbsp
- 3 gallon: 1 rounded Tbsp 5 gallon: ¼ cup

Protein Crumblies® are available in bags (.6 cu. ft.) and 1 ton totes.

Upon request, independent lab reports verifying this product is free of any soil of human pathogens can be provided.

