

BioBuild® N198 w/MIC Nitrogen Management Aid



PCT | Sunrise® BioBuild® N198 w/MIC Nitrogen Management Aid combines a select group of concentrated beneficial microbes with an organic food source applied as a nitrogen management aid for enhanced early growth, vigor and to develop a larger root mass in a corn crop. This product contains millions of microbes per milliliter, originating from over 20 different bacterial strains and are coupled with the micronutrients boron, copper, zinc, manganese and molybdenum.

N198 w/MIC contains living microbial bacteria in a ready-to-use formulation that can be applied to a corn crop with nitrogen fertilizer via sidedress (injected) or in a Y-drop configuration. Since N198 w/MIC does contain biological material in an active state, the product may have a mild odor.

BioBuild N198 w/MIC Includes the Following

- ↳ Over 20 strains of microorganisms that allow for increased nutrient availability and help plants resist diseases.
- ↳ **Boron (1.5%):** Aids in nutrient transfer and tassel and silk formation
- ↳ **Manganese (1.0%):** Supports plant photosynthesis, improving overall plant growth and health
- ↳ **Zinc (4.0%):** Continued strong root development
- ↳ **Copper (0.5%):** Supports photosynthesis, lignin and respiration
- ↳ **Molybdenum (0.1%):** An essential component in two enzymes that convert nitrate into nitrite and then into ammonia before it is used to synthesize amino acids within the plant.



About PCT | Sunrise BioBuild N198 w/MIC

- ↳ Contains strains of bacteria that will help the following:
 - Fix and convert nitrogen for the plant
 - Assimilate phosphorus from organic and inorganic sources
 - Stimulate root and shoot initiation and continue to help the seedling develop plant structure
- ↳ The multiple strains of bacteria for each class will provide a consistent source of nutrition across a wide range of soil conditions and environments.
- ↳ N198 w/MIC has 7 team members that provide nitrogen fixation: 6 root zone nitrogen fixers + 1 endophytic (moves nitrogen within cells throughout the plant)
- ↳ In addition to nitrogen fixing, N-198 w/MIC contains 14 microbe team members that provide ammonification (process of converting organic nitrogen into inorganic ammonia (NH₃) or ammonium ions (NH₄⁺))
- ↳ N-198 w/MIC also possess' 6 microbe team members that release Urease (the enzyme that stimulates the conversion of urea to ammonia)
- ↳ **Note:** over application of nitrogen will not prompt N198 microbe biology to deliver additional nitrogen fixating properties. N198 microbe biology provides more efficient use of proper amounts of nitrogen applied, over application of nitrogen does not increase activity.
- ↳ These bacteria will continue to reproduce on actively growing root systems throughout the growing season. The synergy between microbes and corn roots, coupled with nitrogen fertilizer will feed the bacterial populations, and in return, feed the corn roots season-long, all while helping increase overall soil health.



Usage Rate & Application

Apply BioBuild N198 w/MIC with your Nitrogen application (sidedress, Y-drop, 2x2) at a rate of 2-3 pt/acre.

- ↳ **2 Pints:** when a biostimulant (e.g. 1 pint of BioBuild BioComplete II) is used in-furrow or 2x2 at planting
- ↳ **3 Pints:** when no other biostimulant is used in-furrow or 2x2 at planting. For example, 1 pint with 2x2 application then 2 pints at sidedress
- ↳ **NOT** intended for in-furrow application due to the 1.5% Boron concentration and the potential for seed burn and/or toxicity.

Package Size

- ↳ 2 x 2.5 gal
- ↳ 250 gal tote

Precautions

N198 w/MIC has been tested and used successfully with many crop protection products. However, as with any compound, be sure to jar test tank mix compatibility before applying with other materials. When selecting other chemical products to mix with N198 w/MIC, consideration should be given since some products can be detrimental to living organisms.