

### Overview

Infinite® brand liquid organic fertilizers are manufactured using a patented process to harness the nutrient content of select oilseed sources. This process results in a liquid product that contains all of the nutrients necessary for a plant to grow as well as a variety of carbon sources to help enhance microbial activity and soil health. The product is stable with relatively low viscosity and excellent mixing characteristics with water. Infinite fertilizers include Infinite® Push 3-2-1 and Infinite® Core 2-2-2.

### Using INFINITE® Brand Liquid Organic Fertilizers

It is important to agitate/mix Infinite organic products prior to each use. While Infinite products are formulated to have excellent stability, viscosity and consistency, there will be some stratification of ingredients from long term storage. For small containers such as jugs, shake the container to mix the ingredients. For larger containers, such as totes, use a clean stirring device and thoroughly agitate the product. This should take 3 to 5 minutes.

Infinite can be applied as an in-furrow application at planting; soil applications via drip, micro-spray, pivot or by hand; or foliar applications. Phytotoxicity or "foliar burn" is not a significant issue as with conventional fertilizer products.

Infinite products are screened multiple times during the manufacturing process such that they are suitable for drip irrigation and foliar application. However, we recommend that you dilute Infinite® products when injecting into drip irrigations systems or foliar applications. When injecting Infinite fertilizers into an irrigation system, dilute the product 50% (1 part of Infinite product and 1 part water) before injection. For foliar spray applications, dilute Infinite 33% (1 part Infinite and 2 parts water) to 10% (1 part Infinite product to 9 parts water). More dilution provides better performance. For drip applications, dilute more. For spray or dribble applications dilute less.

When using as a foliar spray, make sure any fine screens are removed from inside the spray tips as a precaution. Using "Flood" type nozzle tips yield best results. We recommend at least 15-20 gallons total spray volume per acre.

### Unused Mixed Product and Storage

As with most organic products, microorganisms may grow rapidly in diluted mixtures. It is very important to use up all diluted product. Do not store any diluted/mixed product in spray tanks. Prepare only enough stock solution (for injection into irrigation systems) that can be used in a few days. For storage of stock solutions after 3-4 days, adding a certified organic surfactant may be helpful. Use at 0.5 fluid ounces per 30 gallons of stock solution or follow product directions. Store unused, undiluted product in a cool, dry area. Do not leave containers opened. Do not contaminate with water or other materials as this will reduce shelf life of the product.

<b>GENERAL RATES</b>	General rates are one quart per acre to five gallons per acre. The crop grown, soil type, climate and irrigation and cultural practices determine rates. Suggested rates are provided below. However, we recommend you consult a certified crop advisor (CCA) to determine appropriate application rate, method and timing that will best suit your farming operation.
<b>VEGETABLES</b>	Apply 1 to 3 gallons per acre (GPA) before, during or immediately after planting. Works well as a liquid band application immediately following planting. Follow with 1 – 2 quarts /acre every seven to 14 days after planting. Increase rate if more growth is desired.
<b>PERMANENT CROPS</b>	Apply 2 to 5 gallons per acre (GPA) after bud break, followed by 1 to 2 quarts/acre every seven to 14 days for best results. For monthly applications, use 2 to 3 GPA. For mild climates, post-harvest applications immediately after harvest at one to five gallons per acre are recommended. Post-harvest rates up to 10 GPA have been used with success depending on nutritional need. For best results when using foliar applications, use 50 GPA total spray.
<b>BERRIES &amp; SMALL FRUIT</b>	Apply 2 to 4 GPA as a pre-plant application or at planting. Follow up with one quart/acre every 7 to 14 days after planting. Increase rate if more growth is desired.
<b>ALFALFA</b>	Apply 1 to 2 GPA at dormancy break and at five to seven days after each cutting. Use a certified organic surfactant if improved wetting is desired. Read and follow product labels. Use at least 20 GPA total spray volume for best results.
<b>COTTON</b>	Apply 2 GPA at planting, as well as first square leaf, flower and boll set. If using foliar applications, use of a certified organic surfactant may be desired. Assure thorough foliar coverage. Read and follow product labels.
<b>POTATOES</b>	Apply 2 to 3 GPA at planting, followed by 2 to 4 GPA at shoot emergence, then one to two GPA at tuber initiation and bulking.
<b>CONTAINER CROPS</b>	Apply 50 to 400 ppm N depending on container size, plant type and application frequency. For best results apply intermittently – every 7 to 10 days. Increase rate if more growth is desired. See chart below for dilution information.
<b>TURF</b>	Apply 1 to 2 quarts per 1000 square feet (SF) every seven to 14 days to achieve desired growth and recuperative ability. This equates to 0.075 to 0.150 lbs. N per 1000 SF. Water in following application.

**Table 2. Fluid ounces of Infinite 3-2-1 to make a one gallon stock solution to achieve various ppm Nitrogen (N) concentrations using various injector ratios.**

Injector Ratio	100	200	300	400
1:15	5.3	10.6	15.9	21.3
1:100	35.6	71.2	106.8	-
1:128	45.5	90	-	-

*Maximum practical dilution is approximately 115 fl. oz. per gallon.*

*Product viscosity may limit the ability for injector pick up tubes to inject Infinite fertilizers. When injecting Infinite® Core 2-2-2, increase rates by 50% or multiply by 1.5*

Table 3. Fluid ounces of Infinite 3-2-1 to make a tank mix solution to achieve various ppm Nitrogen (N) concentrations for direct application.

Desired ppm Nitrogen (N)	One Gallon	50 gallons	100 gallons
50	0.18	9	18
100	0.36	18	36
200	0.72	36	72
300	1.08	54	108
400	1.44	72	144

*Add some water to tank to about half full, then add Infinite organic fertilizer, mix well, then add water to mark. Mix again, then apply. **When using Infinite® Core 2-2-2, increase rates by 50% or multiply by 1.5***

Information provided in this technical bulletin is based on current information to the best of our knowledge and is intended to provide a basis for safe and effective use. Best plant response will be dependent on crop grown, soil type, climate, irrigation and cultural practices. For specific crop recommendations, speak to your Solutions 4Earth representative or consult with a certified crop adviser (CCA) to determine appropriate application rate, method and timing. As always, read and comply with product labels before use.

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