



# PHOSZYME 12-58-0

## ENZYME with WATER SOLUBLE FERTILIZER

### GUARANTEED ANALYSIS

Total Nitrogen (N)..... 12.0%  
*12.0% Ammoniacal Nitrogen*  
 Available Phosphate (P<sub>2</sub>O<sub>5</sub>)..... 58.0%  
 Derived from monoammonium phosphate. F76

**ALSO CONTAINS NON-PLANT FOOD INGREDIENTS:**  
 Phosphatase..... 5.0 x 10<sup>2</sup> µUnits/g  
 Mannanase..... 2.2 x 10<sup>6</sup> µUnits/g

### GENERAL INFORMATION

PhosZyme's powerful enzymes release sugars from polysaccharide chains, enhance water activity, and release phosphate from phosphate sources in soils. This product is designed for dissolving directly in reservoirs, application through irrigation equipment, and injection into fertigation systems.

PhosZyme is applied to all actively growing stages including flowering & vegetative plants, mothers, clones, cuttings, and seedlings. It has a low salt index, so it is ideal for use as a starter or side-dress fertilizer applied directly to soils.

PhosZyme is recommended for use on, but not limited to, vegetable and row crops, deciduous fruit and nut trees, citrus, avocados, vine, hemp, and berry crops, pasture and range grasses, and most other crops.

### STORAGE

#### STOCK CONCENTRATE

Store in opaque containers, at room temperature (71° F), raise off the ground, without exposure to direct sunlight or long periods of artificial light. Use within 14 days of making stock concentrate.

#### DRY SOLUBLES

To store unused fertilizer, remove air and seal bag by folding over and clipping. Best storage is in a cool, dry area outside of direct sunlight or light. Humidity may change the consistency of the fertilizer, but not the performance.



### LIMITED WARRANTY

Front Row Ag ("FRA") warrants that the product conforms to the chemical description given on this label and is reasonably fit for the purpose stated when used in accordance with label directions under normal conditions of use. FRA and Seller make no other warranties, express or implied, including warranty of merchantability or fitness for a particular purpose. Buyer and User accept all risks arising from any use of this product. To the extent allowed by the law, FRA and the Seller shall not be liable to the Buyer or User of this Product for any consequential, special, incidental or indirect damages.

### ATTENTION

Information regarding the contents and levels of metals in this product is available on the internet at [www.aapfco.org/metals.html](http://www.aapfco.org/metals.html). Information about the components of this lot of fertilizer may be obtained by writing to Solstice Agriculture, LLC. and giving the lot number which is found on the bag/label.

### PRECAUTIONARY STATEMENT

Based on currently available data, this product is not classified as a hazardous substance. However, observe good industrial hygiene practices. Wash hands after handling.

**WARNING: Cancer and Reproductive Harm | [www.p65Warnings.ca.gov](http://www.p65Warnings.ca.gov)**

**WARNING: Harmful if inhaled.**

**NET WEIGHT**  
 25 lb / 11.34 kg  
 BT/LOT#

Guaranteed by:  
 Front-Row Ag LLC  
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## RATE RECOMMENDATIONS

Unless otherwise specified, use recommended rates in the following water volumes based on application method. Use sufficient volume to ensure thorough coverage and wetting needed for optimum results.

### STOCK CONCENTRATE INJECTION:

When applied through a dedicated injector, use 160 grams of PhosZyme per gallon to make stock concentrate. Also, when applied through a dedicated injector, use 0.25% injection dilution (9.5 mL per gallon or 2.5 mL per Liter). For best results, make stock concentrate with source water with less than 40 ppm. It is recommended source water contains 1 - 3 ppm Cl from Calcium Hypochlorite.

Acceptable injection ranges, when combined with PhosZyme, are 10-25 mL per gallon (2.6-6.6 mL per Liter).

### DIRECT TO RESERVOIR:

Dissolve 0.2 grams per gallon to 0.5 grams per gallon directly into a reservoir. The recommended rate is 0.4 grams per gallon. First, add any products containing

silicates or any products that tend to form precipitates as concentrate. Then, PhosZyme can be added at any point prior to adjusting pH.

### PER ACRE:

Dissolve 1.5 lbs to 18 lbs in sufficient water to treat one acre. PhosZyme dosage should roughly equal one-third of MAP or DAP per acre recommendations. Reduce MAP and DAP usage accordingly. Repeat as needed. Rate recommendations are based on 2,000 to 22,000 gallons per acre.

**WARNING: PhosZyme is ammonium-based Nitrogen. Over-usage may result in scorching and crop damage.**

PhosZyme contributes about 0.22 EC per gram per gallon. Based on use rate, PhosZyme adds about 0.1 EC to a solution.



PhosZyme

## MIXING & HANDLING

**1 DIRECT TO RESERVOIR**

**ADD R.O. WATER**  
 Fill RTU batch tank to final target volume

**2 ADD FRONT ROW**  
 while agitating. Wait 3-5 minutes between each component addition

**3 MIX**  
 Continue agitation, adjust pH and check solution after 5 - 10 minutes

**1 STOCK CONCENTRATE**

**ADD R.O. WATER**  
 Fill stock tank to 50% of final volume

**2 ADD FRONT ROW & MIX**  
 Start agitation, add total LBS/GAL for final volume, mix for 5 minutes

**3 FILL**  
 Continue agitation while filling to final volume, mix for 10 more minutes

### MIXING

These instructions are for a dedicated PhosZyme stock concentrate tank. Dissolve the recommended amount of PhosZyme into approximately one half the required water. Dissolve 160 grams PhosZyme per gallon final volume into demineralized or reverse osmosis (RO) water. Mix vigorously. Add required PhosZyme. Slowly add the remaining water while maintaining constant agitation. Water quality and temperature will determine maximum solubility. Warmer water temperatures increase solubility and shorten dissolving time. Mix stock concentrate briefly after cooling to room temperature. As this product goes into solution, the water temperature will drop. Therefore, it is important when preparing concentrated solutions to allow for this temperature drop to ensure that the fertilizer is completely dissolved. When combining stock concentrate of Part B and PhosZyme, fully solubilize Part B first and then add PhosZyme, agitate until fully dissolved. PhosZyme is added at 80 grams per gallon to the Part B stock concentrate. When applied through a dedicated injector, use 160 grams of PhosZyme per gallon to make stock concentrate.

### COMPATIBILITY

PhosZyme may be applied separately or in conjunction with Front Row Si, Part A, Part B, Bloom, and with most other fertilizers. When injected, PhosZyme stock concentrate is only compatible with Front Row Part B stock concentrate or must be a standalone stock concentrate. A compatibility test is required if the desired combination has not been previously used. PhosZyme is incompatible with urea, ammonium nitrate solutions (UAN), high ammonium, concentrated pH products,

strong oxidizers, ammonium thiosulfate, potassium thiosulfate. Tank mixtures with copper-based products can be phytotoxic due to increased solubility of copper. Before general applications, apply the solution to a small test area of the foliage to determine any undesirable phytotoxic effects. All stock concentrates are designed to be made with Reverse Osmosis (RO) or demineralized water. Recommended Irrigation Water Temperature: 68°F - 72°F, Stock Concentrate Mixing Temperature: 71°F - 85°F, & Stock Concentrate Resting Temperature: 71°F - 75°F. PhosZyme is incompatible with urea + ammonium nitrate (UAN) solutions, concentrated ammonium, ammonium thiosulfate, potassium thiosulfate, concentrated copper solutions, strong oxidizers (peroxides, peroxyacetic acid, potassium hydroxide), strong acids (i.e., concentrated sulfuric or phosphoric acid), and highly alkaline materials. Always perform a jar test prior to application of any tank or reservoir mixes.

### HOW TO VALIDATE STOCK CONCENTRATE

- From mixed stock concentrate, remove 100 mL and dilute in 1 gallon Reverse Osmosis water.
- Compare results to EC validation value (ms/cm) in the table below.
- Adjust stock concentrate to achieve validation value.

**NOTE:** Values for stock concentrate and reference solutions are based on 0 ppm source water at room temperature (71° F).

Grams/Gallon	Volume per Bag*	EC Validation at 100 mL/Gallon
80	142 gallons	0.45
160	71 gallons	0.95

\*Volume per Bag refers to final volume of stock concentrate including water and fertilizer displacement.