



# Garden Talk

## Water Savings With Soil Polymers

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**Soil polymers** are new compounds designed to save tremendous amounts of water and help get your plants off to a healthy and vigorous start. Mixed with the soil at planting time, these polyacrylamide crystals will absorb 200 to 300 times their weight in water and hold it in the root zone where the plant can use it. The crystals turn into a gel as they absorb water and nutrients and provide the plant with a consistent supply of water even through periods of drought. Soil polymers also improve soil structure by expanding and contracting as the pieces of gel absorb and release water. This action increases air spaces in the soil which plant roots need to exchange oxygen and carbon dioxide. The polyacrylamide crystals that we offer will remain active and save water for 5 to 8 years.

### Which Plants Will Benefit?

Soil polymers have been tested on all types of vegetables, trees, landscape shrubs, ornamentals, bedding plants, houseplants, seed and sod. In all cases, they contribute to greater yields, less transplant shock, greater drought tolerance, and healthier plants. A houseplant with polymer mixed in the soil can be watered generally half as frequently as the same plant without the polymer. In the landscape, polymers basically grab and hold the water that normally seeps deep into the ground out of the reach of the roots of most plants.

### How to Use It?

#### Installing Sod . . . Quick Start Program:

This method reduces transplant shock and accelerates establishment by 50% with less care and less water. Apply with a spreader, 5 pounds of dry crystals per

1,000 square feet before laying the sod. It is not necessary to rake in the polymer crystals. Apply 25% extra along the top of slopes and around the perimeter of the installation area to eliminate the possibility of the new sod drying out. Install sod in the normal manner and water thoroughly. Keep your new lawn moist with deep watering as needed. Your lawn will become established more rapidly and will require less attention than sod that isn't treated with the soil polymer. After the lawn is established, follow a normal maintenance program.

#### Installing Sod . . . Water Saving Program:

This method will save water and fertilizer over an extended period of 5 years or more. The savings in water cost alone will pay for the polymer in 1 to 2 years. Prepare the soil by tilling the dry polymer crystals 4-6 inches into the soil. Most soils will require about 25 pounds per 1,000 square feet of new lawn area. Apply 15-20 pounds per 1,000 square feet in tight clay soils and 30-45 pounds per 1,000 square feet in coarse sandy soils. Rake into the surface 5-10 pounds of **Ferti-lome New Lawn Starter** per 1,000 square of lawn area. Install sod in the normal manner and water thoroughly. Keep your new lawn moist with deep watering as needed. Your lawn will become established more rapidly and will require less maintenance than sod that is not treated with the soil polymer. After your lawn is established you will be able to water and fertilize less frequently because the polymer gel will hold water and nutrients in the root zone for longer periods of time

#### New Landscape Planting:

Mix dry polymer crystals with the backfill. For a one

gallon plant, mix one tablespoon of crystals with the backfill. For a five gallon plant, use 1/4 cup. After mixing the crystals with the backfill, replace the backfill around the root ball and water with a solution of **Ferti-lome Root Stimulator** as usual. For annual bedding and vegetable gardens, till in 1 pound of (continued on back) polymer crystals per 100 square feet of bed to a depth of 4-6 inches.

## **Adding to Existing Landscape Plants:**

This method can be used to save significant amounts of water in plantings less than 5 years old. Older mature plantings already have more established root systems. Punch several holes 8-12 inches deep in the soil around the tree or shrub out to the drip line (the area beneath the reach of the branches). Pour small amounts of dry polymer crystals in each hole, cover with soil, and drench with water. Distribute one ounce of polymer crystals among the holes for each inch of trunk diameter measured at 6 inches above the soil surface.

Pre-moistened polymer gel can also be injected into the soil using a root feeder.

## **New Container Grown Plants:**

When planting in containers, best results are obtained by mixing pre-moistened polymer gel with potting soil. Use one part water-expanded granules to six parts of soil. Pot the plant into the container as usual. Mixing the polymer crystals with a fertilizer solution prior to adding the soil will provide a time released source of nutrients for the plant.

## **Adding to Existing Container-Grown Plant:**

This method is less efficient than mixing with the soil

prior to planting, but it can also save on water and maintenance. Simply poke several holes into the soil with a pencil to about 2/3 the depth of the pot and pour a small amount of the dry crystals into each hole. Cover soil and drench. For a 6 inch pot, make 4 holes and distribute 1/2 teaspoon among the holes. For an 8 inch pot, make six holes and use 2 teaspoons.

## **How to Water:**

It takes about two weeks for the roots of the plants to grow into the water holding gel. Water polymer treated soils at regular levels for the first two weeks. Subsequent watering should be made at about one-half the frequency of untreated soil.

Soil polymers are a great tool for saving water and maintenance. They also improve the plant's growing conditions and contribute to a healthier, more vigorous plant. Ask our **Certified Nursery Professionals** for additional information on the use and benefits of soil polymers.



**wattersgardencenter.com**

1815 W. Iron Springs Road, Prescott, AZ 86305

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