

Soil Moist Polymers

Commercial Applications

SOIL MOIST[™] is a synthetic acrylic polyacrylamide with a potassium salt base. It is a safe, non-toxic polymer used in all horticultural applications. When used according to the application rates, *SOIL MOIST* can reduce irrigation frequency by 50% and last 3 - 5 years in the soil.

BENEFITS: *SOIL MOIST* products are not multi-use polymers that were developed for other industries. *SOIL MOIST* products are potassium based and specifically designed for the horticultural and agricultural industry.

- Reduces plant watering by 50%
- Reduces transplanting shock
- Reduces plant stress due to lack of available water
- Increases soil aeration
- Cost effective - lasts 3-5 years in the soil

APPLICATIONS

LANDSCAPE INDUSTRY: *Bare Root/Seedlings*

Mix one pound of *SOIL MOIST FINES* with 20-40 gallons of water. Pour the *Fines* in slowly and agitate the water by mixing with a paddle or with the force of the water being added. Let the product stand for at least 15 minutes. The

longer the gel is allowed to stand, the tackier it will become and the better it will adhere to the roots. Dip the plant/tree immediately before planting. Adjust the slurry to the thickness that best adheres to the roots. One pound will treat up to 12,000 seedlings. The *Hydro* can be used as a packing medium for transporting bare root stock. Dip or spray material on the root stock.

TRANSPLANTING:

Mix two ounces of *SOIL MOIST* granular per one foot of rootball. Mix a majority of the polymer around the planting hole, mix balance with backfill. Do not amend the top two inches with polymer. Water liberally. Rate should be increased to three ounces per one foot of rootball in sandy soils.

1/2 oz. per 4" rootball

1 oz. per 8" rootball

| Balled and Burlapped | | SOIL MOIST (1000-2000 or 2000-4000 microns) | | On containers smaller than 8", use the 1000-2000 micron size polymer. | |
|-----------------------------|-----------------------|---|----------------------|--|--|
| <u>Caliper Size</u> | <u>Average Amount</u> | <u>Sandy Soils</u> | <u>Containerized</u> | <u>SOIL MOIST</u> | |
| 1" | 2 oz. | 3 oz. | 1 gallon | 1/4 oz. | |
| 2" | 4 oz. | 6 oz. | 3 gallon | 1/2 oz. | |
| 3" | 6 oz. | 9 oz. | 5 gallon | 1 oz. | |
| 4" | 8 oz. | 12 oz. | 10 gallon | 2 oz. | |
| | | | 15 gallon | 3 oz. | |
| | | | 20 gallon | 4 oz. | |
| | | | 30 gallon | 6 oz. | |
| | | | 50 gallon | 8 oz. | |
| <u>Boxed Trees</u> | | | | | |
| 24" | 7 oz. | | | | |
| 36" | 14 oz. | | | | |
| 48" | 18 oz. | | | | |

BROAD AREA TREATMENT:

Flower Beds, Ornamental Gardens

(1000-2000 or 2000-4000 microns)

Two methods available: sprinkle a small amount (1/2 tsp.) of *SOIL MOIST* in the plant hole, plant and cover with soil or apply one pound of *SOIL MOIST* per 100 square feet of ground area. Spread the polymer and work into the soil at a depth of three to four inches.

to four inches. We recommend five pounds per 1000 square feet at depth of four inches for sandy soils. Broadcast the polymer with a spreader or drop seeder for even disbursement. Work into the soil, spread seed or lay sod, roll and soak thoroughly. If applying grass seed, you may want to use our *SOIL MOIST SEED COAT* (technical brochure, Form 190).

TURF/SODDING: (1000-2000 micron size)

Use *SOIL MOIST* at a rate of six pounds per 1000 square feet or 300 pounds per acre if worked into the soil at a five to six inches. Use four to five pounds per 1000 square feet (175 to 225 pounds per acre) if worked into the soil at three

HYDROSEEDING: (HYDRO)

Add three to four pounds of *SOIL MOIST HYDRO* per 1000 gallons of liquid. Slowly pour product in tank and wait five minutes before adding fertilizer. Depending upon mulch used, salt content of water and fertilizer, one acre will require nine to fifteen pounds of *SOIL MOIST HYDRO*. For additional information see technical brochure form 195.

GOLF COURSE GREENS:

For Greens and problem areas, use up to one pound per 100 square feet at a depth of five to six inches in the soil. To determine the square feet area of a circular green, take the diameter, square it and multiply it by .7854.

Example: a 20 foot circular green is 314 square feet; $20^2 \times .7854 = 400 \times .7854 = 314$.

Amount of SOIL MOIST (1000-2000 microns)

| Diameter | Square Ft. | Max. Amt. | Average Amt. (.5 lbs./1000 sq. ft.) |
|----------|------------|-----------|-------------------------------------|
| 10 | 78 | 0.8 lb. | 0.4 lb. |
| 20 | 314 | 3.0 lb. | 1.5 lb. |
| 25 | 491 | 4.8 lb. | 2.4 lb. |
| 30 | 707 | 7.0 lb. | 3.5 lb. |
| 35 | 962 | 10.0 lb. | 5.0 lb. |
| 40 | 1257 | 12.6 lb. | 6.3 lb. |
| 45 | 1590 | 16.0 lb. | 8.0 lb. |
| 50 | 1964 | 20.0 lb. | 10.0 lb. |
| 60 | 2827 | 28.0 lb. | 14.0 lb. |

Convenient Conversions

| | | |
|--------------------|---|---------------|
| 9 square feet | = | 1 square yard |
| 43,560 square feet | = | 1 acre |
| 4,840 square yards | = | 1 acre |

GREENHOUSE/NURSERY: (1000-2000 microns)

To use as a soil amendment, mix two pounds of *SOIL MOIST* per cubic yard of soil. Make sure the polymer is thoroughly mixed for even disbursement. Use two pounds of *SOIL MOIST FINES* or *HYDRO* per cubic yard of soil for mini-cells and small containers. Best results in mixing are achieved when *SOIL MOIST* and *SOIL MOIST FINES* or *HYDRO* are incorporated into the soil in the dry crystal form.

Bulk Mixing

| |
|----------------------|
| 1 cubic foot of soil |
| 1 bushel |
| 1 cubic yard |

SOIL MOIST (1-2mm), SOIL MOIST FINES, HYDRO

| |
|--------------------|
| 1.2 oz. (34 grams) |
| 1.5 oz. (42 grams) |
| 2 lbs. |

ESTIMATED COVERAGE: Based on the usage rate of two pounds of *SOIL MOIST*, *SOIL MOIST FINES* or *HYDRO* per cubic yard of soil, the following information can be used as a general guideline. (Please note: Actual pot dimensions may vary from one manufacturer to another and soil volumes will vary depending upon the type of soil used.)

BULK MIXING

| Container Size | Amount of Soil Moist per individual container | Pots per cubic yard of soil | <u>SOIL MOIST / SOIL MOIST FINES/HYDRO</u> | | | |
|----------------------------|---|-----------------------------|--|--------|---------|---------|
| | | | <u>Amount Treated per Container Size</u> | | | |
| | | | 8 lb. | 30 lb. | 40 lb. | 50 lb. |
| 2 1/2" round | — | 5,616 | 22,464 | 84,240 | 112,320 | 140,400 |
| 2 1/2" square | — | 6,048 | 24,192 | 90,720 | 120,960 | 151,200 |
| 4" round | 1/2 tsp. | 1,296 | 5,184 | 19,440 | 25,920 | 32,400 |
| 4" square | 1/2 tsp. | 1,512 | 6,048 | 22,680 | 30,240 | 37,800 |
| 5" round | 1/2 tsp. | 756 | 3,024 | 11,340 | 15,120 | 18,900 |
| 6" round | 3/4 tsp. | 432 | 1,728 | 6,480 | 8,640 | 10,800 |
| 8" round | 1 tsp. | 162 | 648 | 2,430 | 3,240 | 4,050 |
| 10" round | 1 1/2 tsp. (1/4oz.) | 81 | 324 | 1,215 | 1,620 | 2,025 |
| 10" hanging | 1 1/2 tsp. (1/4oz.) | 135 | 540 | 2,025 | 2,700 | 3,375 |
| 1 gallon | 1 1/2 tsp. (1/4oz.) | 189 | 756 | 2,835 | 3,780 | 4,725 |
| 3 gallon | 1 tbl. (1/2 oz.) | 122 | 486 | 1,822 | 2,430 | 3,050 |
| 5 gallon | 2 tbl. (1oz.) | 50 | 200 | 750 | 1,000 | 1,250 |
| 11" x 2 1/4" x 2 1/4" flat | — | 124 | 496 | 1,860 | 2,480 | 3,100 |

Above estimated coverage does not take into consideration the increase in soil volume when water is absorbed in a potting soil mixture containing *SOIL MOIST*, *SOIL MOIST FINES* or *HYDRO*. Soil volume will increase ten to fifteen percent.

Soil Volumes

| | | |
|---------------|---|------------------|
| 25.7 quarts | = | 1 cubic foot |
| 27 cubic feet | = | 1 cubic yard |
| 1 bushel | = | 1 1/4 cubic feet |
| 22 bushels | = | 1 cubic yard |

Conversion Chart

| | | |
|--------|---|--------------------|
| 3 tsp. | = | 1 tbl. |
| 1 tbl. | = | 1/2 oz. Soil Moist |
| 3 tsp. | = | 1/2 oz. Soil Moist |

100 square feet of bench area, with a depth of six inches of soil is equal to 50 cubic feet of soil.

CAUTION: KEEP OUT OF REACH OF CHILDREN

SOIL MOIST™ products are non-toxic. Keep away from open wounds. When mixing large quantities for bulk mixing, wear a mask, dusty conditions may exist. If ingested or eye contact occurs, call a physician. Spilled materials are slippery when wet. Sweep up spills and place in disposal container. Maintain good housekeeping to control dust accumulations. **DO NOT ALLOW MATERIAL TO ENTER DRAINS.**

 **JRM Chemical, Inc.**

4881 NEO Parkway • Cleveland, Ohio 44128 • 216-475-8488 • 800-962-4010

Fax: 216-475-6517 • E-mail: jrm@en.com • Web: www.soilmoist.com