



SP-1™ T&O

- Improve tilth, aggregate soil and lessen compaction which supports conditions for a larger root mass.
- Fix nitrogen, solubilize phosphorus, and cycle nutrients to become more plant available.
- Hold nutrients and retain them in the rhizosphere to enable more efficient crop uptake

Net Contents: 2.5 Gallon (9.46 Liters)
Net Weight: 20.75 lbs (9.37 kg)



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F002873

Guaranteed Analysis:

Soil Amending Ingredients

Active Ingredients

Microbe Content	1%
Bacillus amyloliquefaciens	7x10 ⁵ cfu/ml
Bacillus licheniformis	2x10 ⁶ cfu/ml
Bacillus megaterium	7x10 ⁵ cfu/ml
Bacillus pumilus	1x10 ⁶ cfu/ml
Bacillus subtilis	7x10 ⁵ cfu/ml
Total Other Inert Ingredients: (Water based culture medium)	99%

Product Description:

SP-1™ is a diverse mix of microbes known to build soil biology. The SP-1™ formula supplies the soil with a proprietary blend of beneficial microbials to support a balanced and healthy soil environment.

The microbes in SP-1™ prefer aerobic conditions and thrive in the upper portion of the soil near the plant roots. Microbial activity near the roots of your crops is ideal to:

- Fix nitrogen, solubilize phosphorus, and cycle nutrients to become more plant available
- Release and retain nutrients in the rhizosphere

Storage & Handling:

Condition of Sale and Warranty: Douglas Plant Health, Inc. warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. Handling, storage and use of the product by Buyer or User are beyond the control of Douglas Plant Health and Seller. Risks such as crop injury or other unintended consequences resulting from, but not limited to, weather or soil conditions, presence of other materials, disease, pests, drift to other crops or property, or failure to follow label directions will be assumed by Buyer or User. IN NO CASE WILL DOUGLAS PLANT HEALTH, INC OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT

SP-1™ should be stored in clean containers that are vented. Not for use on stored seeds. Shelf Life: Microbe count may begin to decline 2 years from Manufacturing Date printed on container. Do NOT store in direct sunlight. If using chlorinated water, call representative for instructions.

Mixing Directions:

We recommend preforming a jar test prior to mixing with any pesticide or fertilizer products. SP-1 can successfully be premixed with many fertilizers no more than forty eight hours prior to the application.

Organic Grower Consideratons:

This product is intended for use according to an approved organic system plan.

It is each certified organic grower's responsibility to get approval from his/her certifying agency before using this product. Because of differences among the various certifying agencies, and differences between NOP/EU/JAS/COR ingredient lists, Douglas Plant Health cannot guarantee that our products will be allowed by your certifier on your farm.

FIRST AID	
IF SWALLOWED:	Rinse mouth. Do NOT induce vomiting. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.
IF IN EYES:	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
IF ON SKIN:	Wash off immediately with soap and plenty of water while removing all contaminated clothing.
IF INHALED:	Remove exposed individual(s) to fresh air for 20 minutes. Consult a physician/poison center if individual's condition declines or if symptoms persist.
You may also contact 1-352-323-3500 day or night for emergency treatment information. If medical advice is needed, have product container or label at hand (P101). Keep out of reach of children (P102). Read label before use (P103).	
STORAGE: Keep container tightly closed. May be stored in unheated area, but keep from freezing. Store in areas inaccessible to children and pets.	
DISPOSAL: Dispose of contents/container in accordance with local/regional/national/international regulations. Do not reuse container.	

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Turf Application Rates

Application	Rate	Frequency / Notes
Regular Maintenance	6-20 ounces in 1-4 gallons of water per 1000 sq.ft. Metric: (236-591 ml) in 3.75-15 liters water per 100 m ² .	Greens apply every 14-28 days. Fairways apply monthly. Sports Turf apply monthly. Lawn Care apply monthly.
Overseeding, Aeration, Newly Seeded Areas, Sod	6-20 ounces in 1-4 gallons of water per 1000 sq.ft. Metric: (236-591 ml) in 3.75-15 liters water per 100 m ² .	Apply after time of aeration, before sodding and after seeding. Re-apply monthly as needed until fully established.
Hydroseeding	60-100 oz per 5,000-8000 sq.ft. per 500-800 gallons of slurry. Metric: (1.75 liter-3 liters), per 465-745 sq. meters, per 1.8-3.0 kiloliters.	Add to tank before seed and mulch. Re-apply monthly at seeding rate as needed until fully established.

Greenhouse, Nursery, and Landscape Rates

Tree and Shrub Care, non-fruit bearing trees	Initial Application: 1-2 gallons per 100 gal water. Maintenance: 1 gallon per 100 gal water. Metric: 3.75-7.50 liters per 400 liters.	Soil inject, drench or spray at appropriate rates to insure proper soil penetration. 2 inch DBH Caliper Tree requires 1.5 gallon solution within the tree drip line area and 1 foot from the flare of the tree. Either with tree soil injection or soil drench techniques.
New Field Plantings and Landscape transplants	Initial Application: 1-2 gallons per 100 gal water. Maintenance: 1 gallon per 100 gal water. Metric: 3.75-7.5 liters per 400 liters	Drench or sprenc h at appropriate rates to insure proper soil penetration.
Annual Flower and Perennial Beds	At Planting, 16- 32 ounces per 100 gallons. Metric: 1/2 to 1 liter per 400 liters	Drench or sprenc h at appropriate rates to insure proper soil penetration. Re-apply monthly at 16 ounces per 100 gallons or 1/2 liter per 375 liters.
Greenhouse plants, injection systems	Initial plug planting or seeding: 32-64 ounces per gallon per stock tank at 1:100. Constant feed, 4-8 ounces per gallon stock tank at 1:100. Metric: Initial plug planting or seeding, 1-2 liter per 3.75 liter stock tank at 1:100. Constant feed, mix 60-120 ml per 3.75 liter stock tank at 1:100	Drench, sprenc h or spray at appropriate rates to insure proper soil penetration.
Hydroponics, Constant Feed, Ebb and Flood	Seeds or Plugs, Mix 4-8 fl oz per gallon of water. Metric: 118-236 ml per 3.75 liter water. Charging, 16-32 fl oz per 150 gallons. Metric: 1/2 liter-1 liter per 1/2 kiloliter. Recharging, 8-12 fl oz per 150 gallons water. Metric: 236-354 ml per 1/2 kiloliter	Soak seeds or plugs in a solution before placing them in growing trays. Charging, run through system. Recharging when new water is added.