



4-6-4 ORGANIC PLANT STARTER & SOIL BUILDER

4-6-4 ORGANIC FERTILIZER DELIVERS A BALANCE OF NUTRIENTS, HUMATES, COMPOST-DERIVED MICROBIOLOGY AND SLOW RELEASE NITROGEN IN AN EASY-TO-SPREAD HOMOGENOUS GRANULE

**KNOWN WORLDWIDE FOR SIMPLY THE BEST...
...NATURAL FERTILIZER & SOIL BUILDERS!**

SUSTANE® 4-6-4 GRANULAR

FASTEST STARTER AVAILABLE

Recommended Use

Sustane 4-6-4 is an organic slow release starter fertilizer and soil builder for all types of plants. Ideal in-furrow starter applications on agronomic crops, and general feeding of specialty crops such as vegetables, roots, herbs, fruits, and flowers. Allowed for use in the production of certified organic crops. Trusted by nurserymen, master gardeners, farmers, and professional growers around the world.

Sustane 4-6-4 is an all natural, compost-based organic starter and maintenance fertilizer. It replenishes the soil with a rich supply of humus and all plant essential nutrients. Sustane 4-6-4 provides a balanced mix of slow release nitrogen and other nutrients derived from biologically stable compost, natural potash, and feathermeal.

Professional Grade

Sustane Natural Fertilizer is backed by over 30 years of independent applied research on diverse crops and ecosystems. Unmatched by any other organic fertilizer manufacturer, such research is the foundation for developing products that deliver value under a wide variety of growing conditions. The superior performance of Sustane products is recognized by growers from around the world.



Benefits of Natural Organic 4-6-4

- Adds approximately 5% humates by volume, increasing cation exchange and organic matter
- Increases nutrient and water holding capacity of the soil, strengthening plant tolerance to hot dry conditions
- Promotes healthy root development
- Improves buffering against changes in soil pH
- Increases the soil's ability to suppress plant pathogens
- Increases soil aggregate stability, porosity, and quality for greater root development and water holding capacity

Safe for Plants, People and the Environment

- Manufactured by Sustane in the USA at an EPA permitted facility
- Pathogen and weed seed free
- Contains no pharmaceutical waste
- Allowed for export to over 60 countries world wide.
- Derived from aerobically composted materials, so it won't attract insects or rodents to the application site
- Contains compost-based microorganisms to help replenish life in poor soils
- Fully tested and compliant with the national organic standards and the Food Safety Modernization Act requirements for fresh fruit and vegetable production

Field Trials on Small Grains: Sustane 4-6-4 vs. a standard synthetic

Sustane natural fertilizers are backed by research, cross-checked and verified by independent labs with third party testing and university field trials.

Crop	MAP 11-51-0 at 50 lb. N per Acre	Sustane 4-6-4 at 50 lb. N per Acre	Yield Increase	Change
Barley	42.6 bushels	53.6 bushels	11 bushels	25.8%
Wheat	31.8 bushels	35.5 bushels	3.7 bushels	11%
Oats	43.3 bushels	68.4 bushels	25 bushels	58%
Canola	18.5 bushels	20.2 bushels	1.7 bushels	9.5%

CROP APPLICATIONS:

Crops	Timing	Appl. Method	cups/100 ft ²	lb./1000 ft ²	lb./acre
Small Grains	at seeding	in furrow	n/a	1	50
Soybeans	at seeding	in furrow	n/a	1	40
Field corn	at seeding	in furrow	n/a	2	100
Apples/fruit trees	annual	broadcast	4.5	15	600
Brassicas*	preplant	incorporate	3	10	400
	3 wk. pre-crown set	sidedress	6	20	800
Carrots	preplant & 4wks later	topdress	1.5	5	200
Curcubits (all vine crops)	preplant	incorporate	9	30	1200
Garlic	apply 3x per season	topdress	1.5	5	200
Legumes	preplant	incorporate	6	20	800
Lettuce (head)	preplant	incorporate	6	20	800
	3 wk post transplant	sidedress	9	30	1200
Onions	at transplant & 10" ht.	topdress	3	10	400
Peppers and Tomatoes	preplant	incorporate	4.5	15	600
	3 wk post transplant	sidedress	4.5	15	600
Potatoes	at seeding	direct on row	9	30	1200
Sweet Corn	preplant	starter	3	10	400
	sidedress	sidedress	4.5	15	600
Raspberries, year 1	at transplant	banded on row	6	20	800
Raspberries, year 2+	spring application	sidedress	9	30	1200
Strawberries, year 1	at transplan/pre runner	in row	7.5	25	1000
Strawberries, year 2+	at dormancy break	topdress	12	40	1600
Flowers	pre or post plant	broadcast	8	30	1200
Tomatoes	at transplant	sidedress 3-4" away	17.2	57.4	2500

*Includes broccoli, cauliflower, cabbage, kale, Chinese cabbage, bok choy, and mustard greens.

Soil Preparation

Light, High Sandy Soil: 6 lb. per 100 ft² of bed (30 kg per 100m²)
 Medium, Clay Loam Soil: 4 lb. per 100 ft² of bed (20 kg per 100m²)
 Heavy, Silty, Clay Loam: 2 lb. per 100 ft² of bed (10 kg per 100m²)

Low Rate: Recommended for use on salt sensitive species; when concurrent with liquid feed; with production systems utilizing low leaching fractions (less than 10%); and when applied to heavy potting substrates (total porosity less than 65%).

Medium Rate: Recommended for use on medium feeding species; on most nursery stock and foliage plants; and when liquid feed is not performed concurrently.

High Rate: Recommended for use on heavy feeding species; with production systems utilizing high leaching fractions (greater than 20%); and when applied to light, porous substrates (total porosity greater than 80%).

**NOTE: ADJUST FERTILIZER PROGRAM FOR LOCAL CONDITIONS AND REQUIREMENTS.

Storage

Store in a cool, dry place. Do not expose to moisture or extreme temperatures. For best results, use by expiration date printed on label.

Item #	Package Size	Units / Pallet
Sustāne 4-6-4		
<i>FINE GRADE, 100 SGN (1.4 mm - 0.6 mm)</i>		
30-20-1311	50 lb. bags	40 bags / pallet
30-20-1351	1-ton tote	1 tote / pallet
30-20-1375	50 lb. bags	44 bags / ISPM pallet
<i>MEDIUM GRADE, 200 SGN (2.8 mm - 1.4 mm)</i>		
30-20-1175	50 lb. bags	40 bags / pallet
30-20-1151	1-ton tote	1 tote / pallet
30-20-1175	50 lb. bags	44 bags / ISPM pallet



4-6-4 BULK DENSITY

ROUNDED MEASURE	WEIGHT GRAMS
1 teaspoon	2.8
1 Tablespoon	8.5
1/4 cup	34
1/2 cup	68
1 cup	136

4-6-4 Guaranteed Analysis

Total Nitrogen (N)	4%
0.4% Ammoniacal Nitrogen	
0.4% Other Water Soluble Nitrogen	
3.2% Water Insoluble Nitrogen*	
Available Phosphate (P ₂ O ₅)	6%
Soluble Potash (K ₂ O)	4%
Calcium (Ca)	4%
Magnesium (Mg)	0.75%
Sulfur (S)	1%
Iron (Fe)	0.25%

Derived from aerobically composted turkey litter, feather meal, bone meal, and sulfate of potash.

*3.2% slowly available nitrogen from aerobically composted turkey litter and feather meal

Total Plant Nutrition

Magnesium	1.00%	Copper	0.05%
Sulfur	3.00%	Molybdenum	0.05%
Iron	0.50%	Boron	0.05%
Manganese	0.05%	Organic Matter	50%
Zinc	0.05%	Carbon:Nitrogen(C:N)	4:1
pH	6.8		
Bulk Density	36 lb./ft ³		
C.E.C. Cation Exchange Capacity	104 meq/100 g		
% of Total N as Slow Release	80%		

V. 05292020