



5-3-1 PLUS

General Fertilizer/Soil Conditioner with Soil Penetrant

Gro-Power® products are based on naturally oxidized leonardite from our own mine in New Mexico. Leonardite adds organic matter to soils that provides a concentrated source of humic and fulvic acids—which stimulates soil microbial life and soil fertility, enhances plant nutrient availability and uptake, improves root development and root mass and growth, and increases plant growth and quality.

Guaranteed Analysis

Active Ingredients:

Total Nitrogen (N)	5.00%
1.00% Ammoniacal Nitrogen	
4.00% Urea Nitrogen	
Available Phosphate (P ₂ O ₅)	3.00%
Soluble Potash (K ₂ O)	1.00%
Iron (Fe)	1.00%
Manganese (Mn).....	0.05%
Zinc (Zn)	0.05%

Derived From: ammonium phosphate, urea, potassium sulphate, oxides of iron, oxides of manganese, and oxides of zinc.

Also Contains Non-Plant Food Ingredients:

15.00% Humic Acids (derived from leonardite)
 1.00% Alkyl Naphthalene Sodium Sulfonate (soil penetrant)

Physical Properties:

Form: solid granules
 Appearance: Dark reddish-brown-to-black particles/dust having no odor.

Caution:

Keep out of reach of children.
 Harmful if swallowed.

WARNING: This product contains chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

Conditions of Sale:

The information contained in this bulletin is believed to be accurate and reliable. Buyer and user acknowledge and assume all liability resulting from the use of this material. Follow directions carefully. Timing, method of application, weather, and other factors are beyond the control of the seller.

Available Product Bag Sizes:

Retail: 8 lb., 20 lb., 40 lb.
 Commercial: 50 lb.

Gro-Power® **5-3-1 Plus** both fertilizes and conditions the soil. Nitrogen, phosphorus, potassium, plus micronutrients are all included to help feed the plant. It is an odorless product with added soil penetrant to aid in improving difficult, poor draining soils.

BENEFITS OF USE:

- Breaks up tight soil and improves aeration
- Enhances soil structure
- Increases water retention capacity of soil
- Ensures deep and healthy roots
- Provides protection from extreme weather conditions and resistance to diseases
- Increases nutrient uptake

SOIL PREPARATION

For soil preparation, we suggest that **5-3-1 Plus** be broadcast at 150–200 lbs. per 1,000 sq. ft. and rototilled to a depth of 6 inches (increase 25 lbs. per 1,000 sq. ft. for each additional 2 inches in depth of rototilling). Forty-five (45) days after grass shows, we suggest another application of **5-3-1 Plus** be broadcast at the rate of 25 lbs. per 1,000 sq. ft. and thoroughly watered. After initial soil preparation with **5-3-1 Plus**, apply product at 25 lbs. per 1,000 sq. ft. at 3 to 4 month intervals. This should maintain the turf and plants in a vigorous condition.

IMPORTANT: Before the first application of **5-3-1 Plus**, if possible, aerate soil to faster get the penetrant down into the compacted soil. Immediately after application, water thoroughly, taking care to wash **5-3-1 Plus** off grass blades or other foliage. **5-3-1 Plus** can be applied to the tenderest grass, but do not use as a top-dress on seed. Do not apply on cool season grass when temperature is above 85 degrees.

PLANTS, SETTINGS	APPLICATION RATES
Grass & Dichondra Lawns	2 lbs. per 100 sq. ft.
Ground Cover (ajuga, ivy, etc.)	2 lbs. per 100 sq. ft.
Bushes, Shrubs, Small Trees	Small plants: 3 tbsp. up to 1/4 cup Medium plants: 1/4 cup up to 1/2 cup Large plants: 1 cup up to 2 cups
Roses, Azaleas, Camellias, etc.	Small to Medium plants: 3 tbsp. up to 1/2 cup Medium to Large plants: 1/2 cup up to 1 cup Extra Large plants: 1 cup up to 2 cups
Pansies, Chrysanthemums, other Flower Beds	2 lbs. per 100 sq. ft. (Be sure to wash product off the plant leaves. Keep the bed moist.)
Citrus, Avocado, Fruits, Evergreen, Berry & Grape Vines	Apply 1/2 lb. for every inch of diameter of the tree. Work into soil lightly around the drip line and thoroughly water. Keep moist for two to three days, then water normally. Feed every 3 to 4 months.
Potting Mix	Apply 15 lbs. to 17 lbs. per cubic yard, or 8 oz. per 1 cubic foot of mix.
Potted Plants	Apply 1 tsp. to 1 gallon container; 2 tbsp. to 10 gallon con, 1 cup to 15 container. Apply product every 2 months. Plants in containers should not be overfed, and care should be exercised in applying product in conjunction with other fertilizers.
Garden Vegetables	4–5 lbs. per 100 sq. ft. Work into soil and thoroughly water. Do not plant seed until the Gro-Power® 5-3-1 Plus has been watered in thoroughly. Feed 2–3 times with a small amount of Gro-Power® 5-3-1 Plus during the growing period.



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