



21-5-20 All Purpose

PRODUCT FEATURES

- This product is covered by one or more of the following US patents or foreign counterparts thereof: 5,171,349; 5,395,418; 5,492,553
- Best for water with medium to high alkalinity at or above 100 ppm CaCO₃ (100 mg CaCO₃/l)
- Contains high nitrate nitrogen
- Can be mixed with all Miracle-Gro EXCEL products

STOCK NO. 91990

- Low phosphorus level makes it excellent choice for use with phosphoric acid
- Maintains solubility in concentrate when calcium nitrate and magnesium nitrate are added *or* when epsom salts (magnesium sulfate) **ONLY** is added
- Ideal for all potted and bedding plants and cut flowers
- Excellent choice for plug production
- Maximum solubility 3 lb./gal.

MIRACLE-GRO[®]
EXCEL[®]

GUARANTEED ANALYSIS

For Continuous Liquid Feed Programs

Total Nitrogen (N)	21%
6.51% Ammoniacal Nitrogen	
12.60% Nitrate Nitrogen	
1.89% Urea Nitrogen	
Available Phosphate (P ₂ O ₅)	5%
Soluble Potash (K ₂ O)	20%
Boron (B)	0.02%
Copper (Cu)	0.01%
0.01% Water Soluble Copper (Cu)	
Iron (Fe)	0.10%
0.10% Chelated Iron (Fe)	
Manganese (Mn)	0.05%
0.05% Water Soluble Manganese (Mn)	
Molybdenum (Mo)	0.01%
Zinc (Zn)	0.07%
0.07% Water Soluble Zinc (Zn)	

Derived from: Ammonium Nitrate, Potassium Nitrate, Urea Phosphate, Boric Acid, Copper Sulfate, Iron EDTA, Manganese Sulfate, Ammonium Molybdate, Zinc Sulfate.

Potential Acidity: 389 lb. Calcium Carbonate equivalent per ton.

Warning: Fertilizer contains more than .001% Molybdenum. It should not be used on forage grass for livestock.

Distributed By:



The Scotts Company
14111 Scottslawn Road • Marysville, Ohio 43041
1-800-492-8255



Water
Soluble
Fertilizers

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Miracle-Gro® EXCEL® 21-5-20 All Purpose Water Soluble Fertilizer

(Suggestions for Commercial Growers)

100 ppm N Solution Contains the Following Elemental ppm			Crop Type	Continuous Feeding ppm N (Constant Liquid Feeding)	Periodic Feeding ppm N (Pulse Feeding)
Ammonium-N (NH ₄ - N)		31.0	Bedding Plants	50–150	150–250
Nitrate-N (NO ₃ - N)		60.0	Containerized Woody Plants	50–100	200–350
Urea-N (Urea-N)		9.0	Cut Flowers	175–225	300–450
Phosphorus (P)		10.5	Potted Chrysanthemums	200–300	350–400
Potassium (K)		79.1	Potted Easter Lilies	200–300	350–400
Calcium (Ca)		0	Potted Tropical Foliage	150–200	250–300
Magnesium (Mg)		0	Potted Geraniums	200–300	350–400
Boron (B)		0.095	Potted Poinsettias	200–300	350–400
Copper (Cu)		0.048	Plugs (All Types)	50–125	175–225
Iron (Fe)		0.476			
Manganese (Mn)		0.238			
Molybdenum (Mo)		0.048			
Zinc (Zn)		0.333			

Ounces of Miracle-Gro EXCEL 21-5-20 Per Gallon of Concentrate						
Nitrogen ppm N	Injector Ratios*					E.C.** mmhos/cm
	1:15	1:100	1:128	1:200	1:300	
25	0.24	1.61	2.05	3.22	4.83	0.15
50	0.48	3.22	4.10	6.43	9.65	0.29
75	0.72	4.83	6.15	9.65	14.48	0.44
100	0.95	6.43	8.23	12.86	19.29	0.58
150	1.43	9.65	12.33	19.29	28.94	0.87
200	1.90	12.86	16.46	25.72	38.58	1.16
300	2.85	19.30	24.69	38.58	***	1.74
400	3.80	25.72	32.92	***	***	2.32

Approximate Gallons Required to Dissolve One 25 lb. Bag of 21-5-20		
Nitrogen ppm N	Injector Ratios	
	1:100	1:200
25	248	124
50	124	62
75	83	41.5
100	62	31
150	41.5	21
200	31	15.5
300	21	10.5
400	15.5	***

* Use the oz./gal. to obtain suggested or desired ppm N. To customize, values are additive. For example, if 275 ppm N is desired, using a 1:100 injector, add 12.86 oz. (200 ppm N) and 4.83 oz. (75 ppm N) to yield 17.69 oz./gal. concentrate. To convert oz./gal. to grams/liters, multiply by 7.5.

** E.C. measurements do not include E.C. of plain water. Since Miracle-Gro EXCEL technology fertilizers reduce overall water alkalinity, the electrical conductivity (E.C.) of fertilizer solutions may be slightly affected. For more information contact your Scotts representative or Scotts Customer Service at 1-800-492-8255 or the Scotts Testing Laboratory at 1-800-743-4769. E.C. calculations are based upon a 100 ppm nitrogen solution with a water alkalinity of less than 100 ppm CaCO₃ (100 mg CaCO₃/l).

***Limit of solubility 3.0 lbs./gal. (48 oz./gal.) Dissolves fast with hot water.

SUGGESTIONS FOR USE

The chemical composition of the irrigation water applied to crops has a major influence on the nutrients available to plants in the long term. Before selecting and/or designing a fertilizer program, first test the irrigation water to better understand pH and alkalinity.

Do not mix Miracle-Gro® EXCEL® fertilizers in the concentrate with fertilizers containing ammonium phosphates or potassium phosphates, such as regular Peters Professional® Water Soluble Fertilizer or other brands of water soluble fertilizers.

Continuous feeding is recommended over periodic or pulse feeding as this practice provides a more uniform and optimal feed program.

Use a reputable laboratory such as the Scotts Testing Laboratory for more reliable media, solution and tissue test results.