



## **KEEP LIFE SIMPLE** with PureGrade Liquid Starter Fertilizer

*PureGrade starter fertilizers are built right!* PureGrade provides the most effective and economical liquid starter fertilizers in the marketplace. *We keep it simple, effective and economical.*

University sources say that ammonium nitrogen in a starter fertilizer helps the plant take up phosphorus. PureGrade fertilizers have ammonium or a combination of ammonium and urea N sources. (Urea changes to ammonium after a few days in the soil.) Some brands use nitrate in their starter fertilizer. Nitrate should be avoided in starter fertilizer because it doesn't aid in phosphorus uptake and has a higher salt index, which can damage germination.

- Salt indexes of PureGrade fertilizers are lower than others who only claim to have low salt index.
- PureGrade publishes product labels, MSDS information and salt index values for its products and makes this information easily available to the public. Many companies do not.
- PureGrade fertilizers do not contain unproven, expensive, organic chelating agents that may restrict nutrient availability to young, rapidly growing crops.
- PureGrade offers liquid fertilizers with high levels of both phosphorus and potassium. 3-18-18, 5-15-15 and even 9-18-9 have much more K than some other brands that sell a low K analysis and call it a special potassium fertilizer.
- PureGrade doesn't waste your money on unproven additives like organic polymers and flavonols. These additives do not increase the amount of nutrient in a gallon of liquid fertilizer, but they do increase your cost.
- PureGrade doesn't push any particular type of nitrogen fertilizer. Growers are encouraged to use the most economical type of nitrogen that works with their application management system. Growers can often greatly reduce their nitrogen application by computing nitrogen credits due to split application, legumes in rotation, manure application, deep nitrate sampling, stalk nitrate tests and organic matter. Nitrification and urease inhibitors and slow release additives can be added when necessary, thus saving the grower money and improve environmental responsibility. You decide what works best in your fields.
- PureGrade liquid starter fertilizers are designed to work with any well-managed crop fertility program. Soil testing is recommended.
- PureGrade fertilizers can be matched to fit other parts of the fertility program – dry or liquid.
- See the table below for the amount of nutrients in a gallon of some common liquid starter and liquid nitrogen fertilizers.

**DO THE MATH. AVOID THE HYPE!**

**Salt index and nutrients in 1 gallon, 3 gallon and 5 gallon for selected fertilizer analyses available in the marketplace.**

Product	Salt Index	SI/Unit of PF*	Lbs/gal	Pounds nutrient in 1 gallon			Pounds nutrient in 3 gallons			Pounds nutrient in 5 gallons		
				N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
6-24-6	11.8	0.33	11.18	0.7	2.7	0.7	2.0	8.0	2.0	3.4	13.4	3.4
9-18-9	16.7	0.46	11.11	1.0	2.0	1.0	3.0	6.0	3.0	5.0	10.0	5.0
3-18-18	8.3	0.21	11.68	0.4	2.1	2.1	1.1	6.3	6.3	1.8	10.5	10.5
5-15-15	11.0	0.31	11.15	0.6	1.67	1.67	1.7	5.0	5.0	3.0	8.4	8.4
9-24-3	20.6	0.57	11.16	1.0	2.7	0.3	3.0	8.0	1.0	5.0	13.4	1.7
2-1-6	10.2	1.13	9.13	0.2	0.1	0.5	0.5	0.3	1.6	0.9	0.5	2.7
27-0-0-1S **	--	--	10.67	2.9	0	0	30 gallons/a = 86 lb/a Nitrogen 50 gallons/a = 144 lb/a Nitrogen					
28-0-0 UAN	--	--	10.67	3.0	0	0	30 gallons/ac = 90 lb/a Nitrogen 50 gallons/a = 149 lb/a Nitrogen					

\*Salt Index per unit of plant food. \*\*Adding organic compounds, chelating agents, etc. does not increase the total amount of nitrogen per gallon.

