PureGrade™ Liquid Plant Food — Manufactured only by Nutra-Flo® Company

PureGrade Liquid Plant Food

PureGrade™ Liquid Fertilizer vs. Dry Fertilizer for Starter Fertilizer Applications

PureGrade Liquid Fertilizer	Dry Fertilizer
PureGrade liquid fertilizers are homogeneous solutions. Every drop contains the same analysis as every other drop.	Dry blends can vary in consistency from batch to batch and even within a batch.
PureGrade does not settle out or "segregate" in the tank. A given analysis stays the same.	Dry blends can "segregate" during transportation and while in the planter's dry fertilizer box. This means more phosphorus here, maybe more potassium somewhere else. The industry is making improvements in this area.
PureGrade Liquid fertilizers have low salt indexes for increased seed safety. Raw materials are chosen for their low salt index. Salt index values are available to customers.	Salt indexes are usually not calculated. A general system of "pounds of salt per acre" from the nitrogen and potassium chloride is often used.
PureGrade fertilizers are non-corrosive. It is unaffected by high humidity and rainy weather conditions.	Most dry fertilizers are corrosive. High humidity or rainy conditions can "cake" the fertilizer in the dry fertilizer boxes.
No yield drag in dry weather. Higher amounts of nutrients are taken up by corn from liquid "pop-up" starters, including PureGrade, even when fewer pounds of nutrient are applied compared to dry fertilizer.	Dry starters can produce yield drag in dry weather according to some university research comparing liquid (including PureGrade) and dry starters.[1,2,3]
Application technology for seed and 2x2 placement of liquid starter fertilizers is more advanced. Fertilizer placement tubes are available for any type of planter or drill. Seed firmer manufacturers also incorporate liquid starter application needs into their designs. Many excellent designs for both seed and 2x2 liquid placement are available.	Application equipment technology hasn't changed much with the exception of air delivery systems from pull-behind carts. Dry starter systems can only "dibble" or "scatter" granules in a seed or 2x2 slot. Continuous band placement cannot be accurately made at lower rates suitable for row placement.
Liquid fertilizer planter application systems are very accurate. Both electric and ground drive pumps are available. Electric pumps are easily controlled from a controller in the tractor cab without additional equipment. Changing the rate of application of PureGrade is easy and can be done on the go. Liquid systems can apply lower rates more precisely. Planters can be retrofitted with liquid systems more easily and with less expense	Field to field rate adjustments require stopping and getting off the tractor. Dry fertilizer application systems are not as adaptable to applying lower rates accurately. Retrofitting planters with dry box systems is usually more difficult and expensive
PureGrade liquid fertilizers are easily stored on the farm in tanks. Taking early delivery of fertilizer insures it'll be ready for use when planting begins.	Taking early delivery of dry fertilizer requires an expensive dry storage area and time consuming handling procedures
Plant more acres per day with less fill time with PureGrade. Many growers size their planter or saddle tanks to hold enough PureGrade to last between seed fills when planting corn. Using PureGrade requires less labor compared to dry.	More stops to fill are required to fill fertilizer boxes on the planter.
PureGrade Liquid Fertilizers are made for exacting placement into the seed furrow and 2x2.	Dry fertilizers fit best in situations where precise placement isn't necessary.

[1]Evaluation of Various Liquid and Dry Starter Fertilizer Formulations for Corn on High P-testing Soils. Pennsylvania State University. Report #04-01
[2]Evaluation of Various Liquid and Dry Starter Fertilizer formulations for Corn on High P-testing Soils. Pennsylvania State University. Report #01-03.
[3]Comparisons of Liquid in-row Pop-Up Starter Fertilizers and Various Dry Blends Placed at 2x2 on High P Testing Soils. Pennsylvania State University. Report #03-01.

Nutra-Flo® Company • Sioux City, Iowa • Ph: 800-831-4815 • www.PureGrade.com