



# Liquid Products LLC

Nutrient Solutions for Ag and Industry

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## 10-34-0 AMMONIUM POLYPHOSPHATE SOLUTION

<u>Guaranteed Analysis:</u>	<u>Percent</u>
Total Nitrogen as N .....	10.0
Total P <sub>2</sub> O <sub>5</sub> .....	34.0

<u>Typical Analysis:</u>	
Nitrogen as N .....	10.5
Phosphorus as P <sub>2</sub> O <sub>5</sub> .....	34.15
Polyphosphate % of Total P <sub>2</sub> O <sub>5</sub> .....	72.5
Phosphorus as P.....	14.83
Iron as Fe <sub>2</sub> O <sub>3</sub> .....	0.5
Aluminum .....	0.4
Magnesium as MgO.....	0.13
Fluoride as F.....	0.11
Sulfate as SO <sub>4</sub> .....	1.4
Calcium as CaO.....	0.01

<u>Typical Properties:</u>	
Specific Gravity @ 75°.....	1.392
Pounds/Gallon.....	11.63
Pounds Nitrogen/Gallon .....	1.16
Pounds P <sub>2</sub> O <sub>5</sub> /Gallon.....	3.95
Pounds P/Gallon .....	1.72
Gallons/Ton.....	172
Freezing Point.....	<-15°F
Viscosity @ 65°F.....	95 CPS
pH.....	6.0
Solids .....	0.0
Color.....	Light Green

<u>Other:</u>	
P.I.N. (D.O.T.) .....	None

### General Information:

10-34-0 is produced by reacting Super-Phosphoric Acid and anhydrous ammonia to produce Ammonium Poly-Phosphate Solution that is clear, 100% water-soluble, with a pH of 6.0, 10% N and 34% P<sub>2</sub>O<sub>5</sub>.

### Materials of Construction-Storage & Transfer Equipment:

1. Tank and vessels: 10-34-0 can be stored in mild steel non-pressure vessels.
2. Pumps, piping etc.: Use only pumps recommended for use with liquid fertilizers. Piping, valves and fittings may be mild steel. Galvanized pipe and brass fittings should be avoided.

### Uses/Compatibility/Stability:

1. 10-34-0 is a non-pressure solution that is well adapted to a wide range of application practices: direct application in pre-plant plow-down programs; injecting or banding in the soil; or applied through irrigation systems; also a source of Nitrogen and Phosphorus nutrient for waste water treatment.
2. 10-34-0 is a compatible source of Phosphorus and Nitrogen used as a base solution when making complete mixes.
3. 10-34-0 is frequently used as a starter fertilizer application (an ideal N:P<sub>2</sub>O<sub>5</sub> ratio for many crops).
4. Stable under normal ambient conditions of temperature and pressure.

NOTE: 10-34-0 is not compatible with Aqua or Anhydrous Ammonia.

### Advantages:

1. 100% water soluble Phosphate--the form most efficiently utilized by plants.
2. Long lasting non-leachable Nitrogen--the Nitrogen is in the Ammonium form, which resists leaching and provides Nitrogen to the plant over a longer period of time.
3. Low volatility--form of Nitrogen and Phosphorus that resists volatility.
4. Nitrogen and Phosphorus combination improves nutrient intake--ammoniacal form of Nitrogen combined with Phosphorus helps the plants to utilize the Phosphorus more efficiently.
5. Helps uptake of micronutrients--it contains Polyphosphates which sequester micronutrients in solution, making them more available for plant uptake.
6. Easy to handle--no bags to lift, break or dispose of. Pumps or gravity do the work.

### Safety:

Ammonium Polyphosphate Solution (10-34-0): moderate eye and skin irritation; not generally considered toxic; non-flammable; non-D.O.T. regulated. No placards required.