



SICO-APP Ammonium Polyphosphate liquid fertiliser 9.5% N + 32% P2O5

Foliar fertiliser with high level of plant available phosphorus

9/2017

1. PRODUCT DESCRIPTION

Ammonium polyphosphate is a mixture of ammonium orthophosphate and different polymerised phosphates such as pyrophosphate and tripolyphosphate characterised by the conversion rate P2O5 polymerised.

2. PRODUCT CHARACTERISTICS

<u>Appearance:</u> pale green liquid

Chemical properties

 $\begin{array}{cccc} & \underline{Typical~analysis} & \underline{Specification} \\ P2O5~total & 32.8~\% & 32~min. \\ N~(ammoniacal) & 9.82~\% & 9.5~min. \\ pH & 6.2 & 6-6.4 \end{array}$

Physical properties

Typical analysis

Viscosity (cP at 15° C) between 50 and 60

Crystallisation temperature (° C) -18 Density 1.36

3. INSTRUCTIONS FOR USE

Can be used as foliar spray/aerial spray/fertigation/soil drench/in furrows. Agitate contents well before dilution. General: min. dilution: a dilution of 1:100 means 1 part product: 100 parts water. In hot weather, use the higher dilution rate where applicable.

Indicative recommended rates (to be used as guide only)

Crop	Rate/ha	Min. dilution	Comments
AVOCADOS - foliar - fertigated	5–10 l 20–40 l	1:150	Apply at spring flush and post harvest as required. DO NOT APPLY IN HEAT OF DAY
CITRUS - fertigated	20–40 I	-	Apply at spring flush and post harvest as required.
COTTON - water injection - foliar	5-25 l 2-4 l	1:10 1:20	Water injection Boom band spray at early emergence.
BROADACRE CROPS - foliar - soil application	4-7 I 20-40 I	1:100	Apply to soil through water injection or planter tank during planting or apply by boom spray in strip prior to or at early emergence stage. NOTE: May be applied at 2-4 leaf stage where necessary, esp. in wet or waterlogged conditions.
HORTICULTURAL CROPS - foliar - soil appllication	5-6 I 20-40 I	1:100	Apply as required. Wet foliage evenly to drip. When practical use higher water rates. DO NOT APPLY IN HEAT OF DAY.







TREE CROPS - seedling transplants	10-20 l 200 ml/tree	1:150	At transplanting apply as a soil drench around young tree
TURF & GRASS	20 l 200 ml/100 m2	1:10	Apply at turf establishment or seeding. Otherwise apply as required to alleviate stress or injury, or to increase root growth and disease resistance. Use higher dilution for bent grass.
VINES Table grapes Wine grapes - foliar	5-6 l or 0.2-1 l/100 l	1:100	Apply as required or 2 foliar applications of 5 l. Wet foliage evenly to drip. When practical use higher water rates. DO NOT APPLY IN HEAT OF DAY. Do NOT exceed
- soil application	water 15-20 l		1x concentration as phytotoxicity may occur. Do not exceed max. per hectare rate.

4. ADVANTAGES OF SICO-APP

- ROLE OF PHOSPHORUS

Plants need phosphorus at all growth stages, particularly in early growth stages as it is necessary for cell division and growth within the plant. Although mobile within the plant, it is relatively immobile in soil.

- PHOSPHORUS DEFICIENCY SYMPTOMS
 - purple older leaves
 - purple stems
 - dark yellow leaf tips
 - low yield
- WHAT ARE POLYPHOSPHATES?

Well-known phosphorus sources such as MAP and DAP contain phosphorus which is in the 'orthophosphate' form ie. these are single phosphate molecules which easily become locked and unavailable to plants when applied to high pH, calcareous and acidic soils fixing phosphorus.

The phosphorus in ammonium polyphosphate is not subject to this lock up. The reason for this is its long chain structure. During production of ammonium polyphosphate the extreme temperature of the reaction forces water out of the structure, thus forming polymer chains between the phosphate molecules. These polymer chains vary in size, giving the effect of a slow release phosphorus source.

SICO-APP is an ideal starter and foliar fertiliser when high levels of phosphorus are required for growth and root production.

Benefits of SICO-APP

- Completely soluble and plant available delivering the required amount of nutrients with low application rates.
- Ability to sequester and free insoluble trace elements in the soil making them available to the plant.
- Unique polymer characteristics ensure phosphorus remains readily available in all types of soils.
- Slow release source of phosphate provides controlled delivery of nutrients in soil to maintain even growth
- Can also be applied on foliage of broadacre crops.

5. COMPATIBILITY

Good agricultural practice requires that applications be avoided under extreme weather conditions such as temperatures over 28° C, high humidity, frost, rain etc.

It is recommended that when applying to a crop or area for the first time, or in combination with other chemicals, a small test area should be sprayed and observed prior to the total spray. Where possible, it is recommended that regular leaf (sap) tests are conducted to determine actual plant nutrient availability during each growth cycle. Soil tests at least once per year are essential.

