

Plant Available Silicon (PAS)

Expected Results

The only product that delivers mono silic acid in a plant available formulation for foliar application.

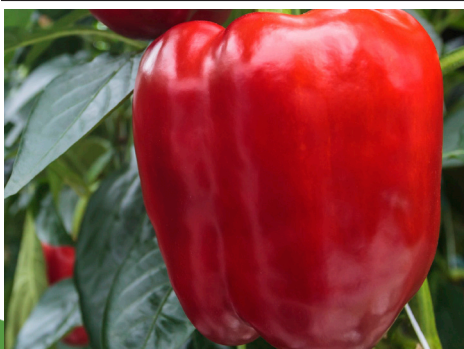
General Comments

Silicon is a major component of sand, silt and clay materials, therefore not normally considered to be a limiting factor in soil fertility. Numerous field studies have shown that treating crops with plant available silicon **can suppress plant disease, reduce insect attack, improve environmental stress tolerance and improve productivity.**

- **Firmer** and more durable fruit post harvest
- **Improved** resistance to pest and disease attack
- **Better** utilisation of available nutrients
- **Compatibility** high due to acidic pH

Uptake of Silicon

Plant Silicon can only be available to the plant when it is in an acid solution. Therefore products such as Potassium Silicate and Sodium Silicate, being alkaline formulations, cannot provide adequate levels of plant available Silicon (PAS) for there to be a plant response.



300 ml of AgriSiL contains the same amount of PAS as 1,000kg of Potassium Silicate.

Foliar applications require only low levels of Silicon and can influence the plant to produce larger root systems.

Chemical Names

- **Silicon** refers to the chemical elements (Si).
- **Silicone** is a rubber synthetic compound used as a sealant.
- **Silicate** refers to Silicon containing crystalline or amorphous compounds, Calcium silicate (CaSiO_3), Magnesium silicate (MgSiO_3), Sodium silicate (NaSiO_3), or Potassium silicate (K_2SiO_3).

Silicic acid or mono silicic acid (H_4SiO_4) is the plant available form of Silicon.

Silicon has been shown to benefit the soil, micro-organisms and plants as a bio-available molecule. When Plant Available Silicon (PAS) is applied, plants show improved growth, increased structure, reduced nitrate and sap pH levels, increased pest and disease resistance and better fruit shelf life.

Directions for Use

Restraints: Add AgriSiL to the tank of fresh water before adding other fertiliser or crop protection products. DO NOT pre-mix AgriSiL for foliar or fertigation application. APPLY product within 3 hours of mixing in the spray tank.

CROPS	RATE	COMMENTS
BERRIES	Foliar: 300 - 600ml/ha Drip Irrigation: 500ml/ha	Foliar application: Apply at a water rate of 400 to 1,000 L/ha. Apply from 3 - 5 leaf stage at 2 week intervals. Apply 4 to 6 applications throughout the crop.
TREES & NUTS	Foliar: 250ml/ha Drip Irrigation: 500ml/ha	Foliar application: Apply at a water rate of 400 to 1,000 L/ha. Apply from flowering through until 20 days before harvest. Apply 4 to 6 applications throughout the crop.
VEGETABLES	Foliar - 250ml/ha Drip Irrigation : 500ml/ha	Foliar application: Apply at a water rate of 400 to 1,000 L/ha. Apply from 3 - 5 leaf stage at 2 week intervals. Apply 4 to 8 applications throughout the crop.
WINE & TABLE GRAPES	Foliar: 300ml/ha Drip Irrigation: 500ml/ha	Foliar application: Apply at a water rate of 400 to 1,000 L/ha. Apply from budburst/ first leaves stage. Apply 4 to 6 applications throughout the crop.
RICE,CANE, CEREALS	300ml/ha	Foliar application: Apply at water rate 200-400L/Ha, from 2-3 leaf stage throughout the crop 4-6 applications.
TURF	200 ml/ha 350 ml/ha	Foliar application: Apply fortnightly in a water rate of 200-400 L/ha. Foliar application: Apply monthly in a water rate of 200-400 L/ha.

