



AMIX SiLK is an activated formulation of soluble silicon with potassium designed to improve stress-tolerance, quality and shelf-life of fruits & vegetables.

The role of silicon in plant biology is to reduce multiple stresses. It is also known to increase drought tolerance in plants by maintaining plant water balance, photosynthetic activity, erectness of leaves and structure of xylem vessels under high transpiration rates.

It was found that the application of soluble silicon and potassium increased the amount of free amino-acids in the leaves of papaya plants. Under stress, crop metabolism is affected and the plant releases amino acids related to defence responses or osmotic adjustment to improve its tolerance to the stress event.

Adequate Potassium is required in many crops for fruit fill and fruit sizing. Silicon is important for crop quality and shelf-life.

Foliar Silicon fertilisation by soluble silicates has the potential to mitigate environmental stresses and soil nutrient depletion and consequently is an aid to the reduction in extensive use of pesticides for maintaining sustainable agriculture.

Silicon has positive effect on the biomass and yield under deficit irrigation.

Plants subjected to drought, treated with soluble silicates, maintained higher stomatal conductivity, relative water content and water potential.

Soluble silicates help leaves become larger and thicker, thus limiting the loss of water through transpiration and reduces water consumption. Silicon shows great influence on the development of plant roots, thus allowing better root resistance in dry soils and its faster growth.

NB: ONLY soluble silicates are capable of foliar uptake. ONLY **mono**-silicic acid and soluble silicates can be absorbed by the roots. Silicone is a complex **insoluble polymer** that contains Silicon bound to oxygen. Silicones do not naturally exist in nature and do not generate plant-available Silicon.

Type:

AMIX – Multiple Micronutrients – (Si, K)

Features:

- Increases Turgor pressure in gramineous crops
- Promotes active uptake into the crop – unlike most trace elements that rely on passive absorption (request presentation for full details)
- Low application rates – economical to use
- Improved activity in low temperatures – can be used earlier in the spring
- Adjuvant effect improves pesticide efficacy e.g. fungicides
- Reliable in all conditions
- Crop safe -reduced leaf scorch
- May be used to improve turf quality

Product Specs:**Appearance:**

Dark brown Liquid

Typical Analysis:

Potassium (K₂O) : 100g/L

Silicon (SiO₂): 147g/L

Crop Types & Application rates:

For use on all crops capable of benefitting from Silicon as a readily available beneficial element in a soluble form.

1.5 to 4.5 Litres per hectare from 4 to 5 true leaves. Minimum of 200L water/ha

Timing - Apply early to young plants using the lower rate of application to enhance root development and early drought resistance.

AMIX Silk may be used all season as part of a programmed approach or when plant available potassium is required.

Plant-available silica is a “hidden deficiency” in many crops.

Suggested programme is every 2 to 3 weeks increasing dose with increase in plant mass.

To build brix levels. As silica is not readily transported within the plant more than one application will be required per season to ensure the full benefits.

Potassium silicate is very alkaline and recommended rates should never be exceeded to avoid possible plant damage

Mixing & Spraying:

Avoid tank-mixes with any products incompatible with alkaline spray water.

Compatibility:

For more information please speak to your distributor, qualified agronomist, or the team at Micromix Plant Health info@micromix.com