

FEATURES

Salinity Corrector

ARCHER

ARCHER is an excellent corrector for saline soils and waters.

Salinity problems occur when soluble salts, from irrigation in productive soils, are concentrated, which is called secondary salinisation. This phenomenon affects humanity since agriculture began, and there are historical records of migrations caused by salinisation of arable land.

Salinity affects growth and crop production by reducing the water potential of the soil solution, thereby decreasing water availability, and creating a nutritional imbalance due to the high concentration of elements (Na^+ , Cl^-) that can interfere with mineral nutrition and cell metabolism.

ARCHER is based on complex Calcium with lignosulphonates and rich in organic matter, which increases soil microbial activity, improving its physicochemical properties, cation exchange capacity (CEC) and displacing sodium ions (Na) from clay-humus complex activating the assimilation of other soil nutrients required for the plant.

Calcium has a moderating effect on salinity effects and especially on the sodium in the soil and in the plant.

Calcium, being a bivalent cation with a lower hydration layer, moves sodium out of the exchange complex and improves the aggregation of saline soils. A most important activity of calcium and other cations in soils with sodium reduces the toxic effects of this element in plants.

Calcium also promotes the exchange in the clay-humus complex of the soil and the displacement of its sodium ions, which are leached and separated from the exchange complex, reducing the percentage of interchangeable sodium.

GUARANTEED ANALYSIS

Total Nitrogen (N)	: 4 % (w/v)
Water-Soluble Calcium Oxide (CaO)	: 10 % (w/v)
Calcium Oxide (CaO)	
Complexed with Lignosulphonate	: 10 % (w/v)



BENEFITS

Improves the cation exchange capacity (CEC) thanks to the physical, chemical and biological characteristics of the organic matter that it contains. CEC is the ability of a soil to retain ions, including nutrients. The higher the cation exchange capacity, the greater the amount of calcium that the soil supports, improving its structure.

Displaces the Sodium (Na^+) ions of the clay-humic complex thanks to the action of its 100% complex calcium. Sodium is an ion detrimental to both the soil structure and the plant. Calcium has the capacity to move it, so it can be washed later through leaching.

ARCHER corrects the salinity of irrigation water in the same way it occurs with soil salinity. When applying water with a high amount of calcium we will be compensating the salts that we add to the soil through the water, avoiding the problems associated with increases in salinity.

The polyhydroxy carboxylic acids found in ARCHER are the best change carriers and are the perfect soil conditioner for salty soils.

WHY ARCHER (SALINITY CORRECTOR) IS IMPORTANT

Saline and sodium chloride soils are an important problem for plants, specially plants that are sensitive to salinity. High levels of sodium bring about the increase levels of salinity and the dispersion of colloids destroying the soil structure and causing poor ventilation that affects to the growth of the roots. The consequences are: not enough water and introduction of the roots, erosion problems, low germination and high stress for the plants.

Effects in plants are:

- Osmotic effects.
- Low availability of nutrients.
- Loss of structure.
- Toxicity effect.

INSTRUCTIONS FOR USE

15 - 20 Lt. / Ha by drip irrigation application. It can be up to 50 Lt. in extreme soil salinity.

USAGE AREA, FORM, TIME AND QUANTITY

Citrus and fruit trees: 10-16 Lt. / Ha.

Vegetables: 5-8 Lt. / Ha.

Flowers and ornamental plants: 3-6 Lt. / Ha.

Tropical fruit trees: 9-14 Lt. / Ha.

Olive trees and vines: 8-10 Lt. / Ha.

Herbaceous and woody crops: 8-10 Lt. / Ha.

DOSAGE

Dosage of ARCHER can be established by knowing beforehand the salinity level of the soil by measuring the ionic conductivity.

The volume of ARCHER, in mL, per litre of irrigation water, can be deduced by multiplying x4 the conductivity expressed in mS / cm. For example, if the conductivity is 5 mS / cm., the dose should be 20 mL. / Lt. of water.

For fertigation, the dose should generally be 30 to 80 Lt. / Ha per crop cycle.

For flood irrigation, the dose should generally be 60 to 120 Lt. / Ha per crop cycle.

Maintenance: Add 20 to 40 mL. of product per m³ of the irrigation area.

MIXABILITY

It is recommended to conduct small container compatibility tests before mixing with the other products. To be used only if required, and do not exceed the recommended dosages.

PACKAGING:



1 Lt 5 Lt 10 Lt 20 Lt 20 Lt



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