



# CRYSTAL EARTH<sup>®</sup> 90 WSC

## Humate in crystal form

Distributed by:  
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## Composition and Properties of Humic Acid

Water soluble Humic acid (dry basis) : 90%,  
 Soluble K (K<sub>2</sub>O dry basis) : 10-12%,  
 Iron (Fe) : 1%,  
 Moisture : <10%,  
 pH value (in 1% solution) : 8-9,  
 Colour : Black brown,  
 Product type : 1-15 mm crystal  
 CEC : 450-550meq/100g

Batch No.

Mfg Date:

Shelf Life (*Maisha Rafuni*): 2 years from date of manufacture when stored in the original unopened container in a cool, dry & dark place.



### CAUTION



### Conditions favouring use of CRYSTAL EARTH 90 WSC

- Sandy soils with low organic carbon.
- Arid and semi arid areas.
- Highly alkaline and acid soils.
- Soils with a low Cation Exchange Capacity (CEC).

**STORAGE AND DISPOSAL:** Store in original tightly closed container in a cool, dry and well ventilated place out of reach of children, animals and food stuff.

**PRECAUTION:** Wash hands and exposed skin after use.

### SELLERS GUARANTEE (WARRANTY):

Seller's guarantee is limited to the terms set out on the label and subject thereto. The buyer assumes the risk to persons or property arising from the use or handling of this product and accepts the product on that condition.

**MAELEZO:** CRYSTAL EARTH 90 WSC ni aina za chembe chembe zinazoyeyuka kwa maji na hutumika kwa ukulima wa maua n.k. Inaweza kutumika kwa kilimo cha kutonesha(drip irrigation) ama cha mrashi(sprinkler and pivot systems). Inapatikana kwa mkusanyiko wa 90%. CRYSTAL EARTH 90 WSC huchangamsha ukuaji wa mimea na kutengeneza muundo wa mchanga. Mkusanyiko huu unaweza kuhifadhika na kusafirishwa kwa urahisi.

Uyeyukaji wake unarahisisha kutengeneza kwa rutubishi (fertilizer) za maji kwa bei ya chini.

Inapatana na rutubishi kemikali pamoja na viuwadudu.

**KWA MAELEZO ZAIDI KWA LUGHA YA KISWAHILI KAMA VILE:** Faida za Humic Acid 90WSC, Umuhimu wake kwa mchanga na mmea, jinsi ya kutumia, SOMA KIFURUSHI KILICHO NDANI.

**GENERAL DESCRIPTION:** CRYSTAL EARTH 90 WSC is 100% water soluble humate in crystal form. It is available in a concentration of 90% and can be used on flowers, landscaping and gardening, for agricultural and horticultural use as well as in field crops. It can be used in drip irrigation, sprinkler and pivot systems targeting the soil surface.

CRYSTAL EARTH 90 WSC may be used in all types of soils and for all types of crops.

CRYSTAL EARTH 90 WSC stimulates plant growth and improves soil structure.

- ▶ It is easy to handle in storage and transportation.
- ▶ It has an excellent solubility in water thus guarantees formulators of making excellent and stable liquid fertilizers at lower cost.
- ▶ It is suitable for application with most solutions of chemical fertilizers or pesticides through irrigation systems or spray tanks

### DIRECTIONS FOR USE:

Dilute CRYSTAL EARTH 90 WSC in water and inject the solution through the irrigation system (drip, sprinkler, pivot etc.)

### DRIP / SPRINKLER / PIVOT IRRIGATION

Spectrum of usage	Rate/Ha	Application timing
Greenhouses (Flowers, vegetables etc.)	0.6 - 1.2kg	After 7 days
Plastic tunnels	0.6 - 1.2kg	After 7 days
Open field (Vegetables, potatoes, beans etc.)	0.6 - 1.2kg	After 7 days
Fruit trees (Apples, citrus, bananas, mangoes, passion fruit etc.)	0.6 - 1.2kg	After 14 days during the growing season
Root Dipping	30g/20L per root dipping solution	Dip the roots into the solution prior to planting

### Benefits of Crystal Earth 90 WSC.

**(A) It is important to the soil as it helps:**

- ▶ **Increase water holding capacity:** The colloidal nature of humic acid allows it to absorb large quantities of water, thus increasing the soil water holding capacity. Crops tend to be more drought resistant when grown on soils high in humic acid.
- ▶ **Reduce nutrient loss** by enhancing nutrient uptake
- ▶ **Improve the soil structure:** Crystal Earth increases soil particle aggregation as well as water movement caused by capillary and non-capillary spaces.
- ▶ **Promote root development and Improve nutrient uptake by the root system:**

Crystal Earth and its derivatives enhance the permeability of plant cell membranes, which in turn allows a more rapid entry of minerals into the root cells and thus results in higher uptake of plant nutrients.

**(B) It is important to plants as it helps:**

- ▶ **Stimulate plant growth.** Crystal Earth when used at early stages of growth is a supplementary source of polyphenols which function as respiratory catalysts. This results in increased plant life activity:- intensified enzyme systems, accelerated cell division, greater development of root systems and ultimately more and healthier plant growth.
- ▶ **Crystal Earth 90 WSC increases the yield.**
- ▶ **Improves the quality of plants.**
- ▶ **Improve nutrient uptake through the leaves and roots.**
- ▶ **Improves the effectiveness of pesticides.**
- ▶ **Chelates with micronutrients and releases bonded phosphorous.**