







# **BIOVAL DICLOR (+ ACTIVATOR)**

WIDE SPECTRO DISINFECTANT

EFFECT AGAINST BACTERIA, FUNGI, VIRUS AND NEMATODES **LIQUID** 

FOLIAR / DIRECT TO THE SOIL / SYSTEMIC / POSTCOSECHA

ALL CROPS (and in any phenological stage)

**REQUIRES TO ACTIVATE** 

**NEUTRAL CHLORINE COMPOUND** 

100% biodegradable

### **DECLARED CONTENT**

Chlorine dioxide ClO2 100,0 % p/p

# PHYSICOCHEMICAL CHARACTERISTICS

The latest generation of chlorine dioxide BIOVAL DICLOR is a yellow gas with a molecular weight of 67.46 g / mol, trapped in aqueous medium, high solubility and stable in a wide pH range without losing its biocidal efficacy between pH 4- 10, used at very low concentrations. It requires very little contact time, is non-toxic, corrosive or flammable and is environmentally friendly. It dissipates in the environment in hours without leaving residues.



# **PROPIEDADES**

BIOVAL DICLOR attacks microorganisms (fungi, bacteria, viruses, nematodes,

unicellular parasites, spores ...) by oxidation of the components of the cell membrane to destroy them and prevent their renewal.

**BIOVAL DICLOR** interrupts the process of phosphorylation of the pathogens so that none will generate resistance.

It does not attack organic matter.

Attacks in hard water (300 ppm Ca).

Harmless to plants and animals.

No residue of smell and taste.

Approx. 100%.

Applicable even hours before cutting (harvest). Controlled pathogens: Fusarium (strawberries and

tomatoes).

Phytophthora (tomato), Rhizoctonia (vegetables), Pythium (melons and watermelons), Yesca (vine) and others.



**BIOVAL DICLOR SHOULD NEVER BE MIXED** WITH ANOTHER TYPE OF PRODUCT.

# STORAGE:

Keep in original container.

Away from food, drink and feed.

In a cool, dry place and without prolonged exposure to the sun. Do not stack more than 3 heights.

It is recommended to use it before 2 years from the date of lot. Precautions, risk phrases and safety: see label on packaging.

#### PRESENTATION:



**BIOVAL DICLOR** is commercially available with the included **Activator** 

# BIO Diverse



**BIOVAL DICLOR (+ ACTIVATOR)** 





# **ACTIVATION, USES AND APPLICATIONS BIOVAL DICLOR (+ ACTIVATOR):**

#### I.-ACTIVATION:

BIOVAL DICLOR is a solution that must be activated at the moment of its use. It can be preserved for a long time without losing effectiveness.

The ACTIVATION PROCESS is prior to mixing with water and consists of:

- Step 1.- Mix BIOVAL DICLOR in a container with the accompanying activator and always in the same proportions (% product =% activator).
- Step 2 .- wait between 45-60 seconds (when doing this, you will notice that the mixture starts to bubble and smoke).
- . Step 3.- After the indicated activation time (60 sec) proceed to mix BIOVAL DICLOR already activated with the amount of water, according to the purpose of its use.

#### II.- USES:

BIOVAL DICLOR can be used preventively or curatively to disinfect seeds and to eradicate diseases of the crop caused by pathogens (fungi, bacteria, viruses, nematodes ..) very limiting by their application to the soil. Also for disinfection of planting sites, as a systemic injection to the stem (according to cultures) in diseased plants and as a post-harvest washing solution. It also serves to disinfect irrigation or fumigation water and to disinfect tools.

#### III.- APPLICATIONS AND MORE FREQUENT DOSAGES:

As a liquid solution, it can be applied to the spray irrigation system or be sprayed to control spore propagation diseases.

· Application directed to the soil: It can be done before planting or in plantations already established in a directed way.

Doses are used between 2-3 L / hectare of BIOVAL DICLOR already ACTIVATED at 500cc per 1000L of water. It should be applied to the soil with good humidity and low temperature (near sunrise or sunset) or on cool days. Carry out the calibration of the fumigator before beginning to guarantee the dose and volume of water. If appropriate, due to the seriousness of the problem, use plastic immediately to cover the fumigated area. So, make sure it is as airtight as possible and leave it at least 2 hours on. This will achieve the desired control and recover the productive potential.

- Direct application for disinfection of seed sites: it should be applied directly at a rate of 0.5 ml of BIOVAL DICLOR already ACTIVATED per site and with at least 500 cc (half liter) of water per site. Prepare the solution according to the total number of sites to be treated. Observe the recommendations given for application to the floor.
- Foliar application: Apply by foliar route with both preventive and eradicating effect and limiting the proliferation of diseases by shock effect. The dose responds to 250 ml of BIOVAL DICLOR already ACTIVATED, at least 200 Liters of water per mixture.
- $\cdot \textbf{Post-harvest washing:} \ at \ a \ rate \ of \ 250 \ ml \ of \ BIOVAL \ DICLOR \ and \ ACTIVATED \ every \ 200 \ liters \ of \ water.$
- Disinfection of irrigation water or fumigations: 1-2 ml of BIOVAL DICLOR already ACTIVATED for every 10 liters of water (20-40 ml per 200 liters of water).

For suggested applications not included in this site, consult with

- BIOVAL Tech. Service Unit -

It is recommended, however, to follow the doses and applications established by their technicians at field level, which will vary according to type of crop, their extractions in fertilizer units and the phenological state of the same. From "Distribución del Levante Bioval, S.L." or through our agents or distributors we can advise you as to the usage dose according to your cultivation.