

Bladbuff 12

Reg. No. L8201, Act / Wet No. / Nr. 36 of / van 1947

A water quality improving agent containing wetting and spreading agents, humectants and acidifiers with built-in pH indicators for use with contact and systemic pesticides, fungicides, herbicides and foliar feeds.



**NPE
FREE**

Water: the most important component in the spray tank

The largest and most important component of the spray tank is water. In most cases, and especially with pesticides, the quality of the water is critical. The reason for this is that the active ingredients of pesticides are very sensitive to the pH, as well as the dissolved salts in the water used in the spray tank.

2,4-D for example, can bind with dissolved salts in the water, effectively changing the structure of the molecule and making it less effective (figure 1 below).

Modern agricultural chemicals (pesticides) are designed to break down after exposure to water. For this reason, pesticides have a withholding period. The withholding period is an indication of how long the active ingredient will still persist on the crop before it breaks down into basic (non-toxic) components. The process by which active ingredients break down is called alkaline hydrolysis. This process is accelerated by (particularly) pH. At a pH of around 3,5 to 4,0, the life of most active ingredients is dramatically increased. Benomyl, for example, has a half life of 1 hour at a pH of 7. If the pH is decreased to 5, the half life is increased to 30 hours. This is important, as it

ensures that the pesticide that the farmer adds to the spray tank is still active at the time of application.

Bladbuff is well-known to farmers in South Africa. This internationally patented product is the answer to water quality problems. Bladbuff 12 (NPE-free) addresses all water quality problems in one step. It has unique colour indicators: one colour change at pH 7 and above (green), one at pH 5 (yellow) and one at pH 3,5 (red). Firstly, all harmful salts in the spray water are "bound" or "disabled" so that these do not bind with the active ingredient of the agrochemical product, thereby avoiding a change in the structure of the molecule. Apart from that, Bladbuff 12 then decreases the pH of the spray tank water to desired pH and buffers the pH thereby reducing alkaline hydrolysis. Bladbuff 12 also has wetting properties, increasing the uptake and efficacy of pesticides.

Bladbuff 12 has no fixed recommendation rate, as this rate is determined by the quality of the water. The amount of Bladbuff required in the spray tank can easily be determined using a simple test kit. The amount of Bladbuff required will differ for different water sources, with higher rates being required for hard water as it has a high salt content.

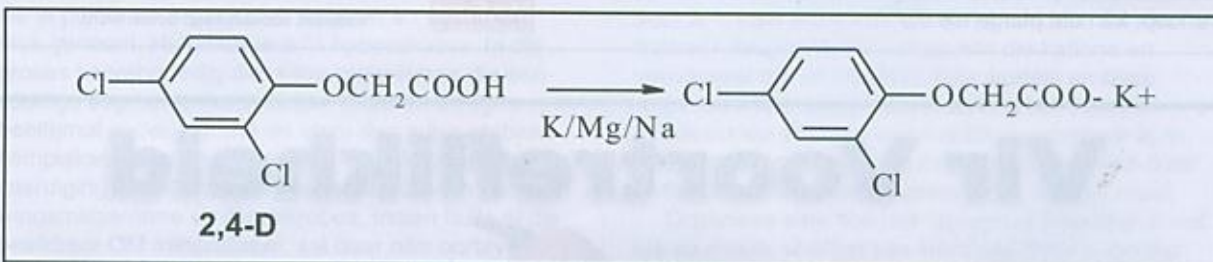


Figure 1. 2,4-D molecule bind with potassium, magnesium and sodium ions and the structure change.

5-a-Day awareness is on track

South African consumers are increasingly aware of the importance and benefits of including at least five servings of vegetables and fruit in the daily diet. The 5-a-Day campaign was re-launched in 2005. In this process a new logo was designed. Recent research conducted by Pick n Pay reaffirms that the 5-a-Day for Better Health trust – of which Pick n Pay is a founding trustee – has made solid inroads into educating



consumers. Researchers found that a quarter of the almost one thousand shoppers polled, claimed to have heard of 5-a-Day. More than two thirds of these respondents knew that 5-a-Day was about eating at least five different vegetables and fruit everyday.

In a recent article published in *SA Groente & Vrugte / SA Vegetables & Fruit*, the old 5-a-Day logo was mistakenly used.