



New **NPE FREE** Adjuvant Range

Biodew

Bladbuff
7

Bladbuff
12

Sylgard

Enhance

Tronic



Plaaskem

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UAP

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The new NPE-free adjuvant range from Plaaskem



Adjuvants have become an integral part of modern agricultural pest control over the period of time since their inception into the agrochemical market. The reason for this is simply because adjuvants improve the efficacy of an agricultural remedy by one or more actions. Different adjuvants have different actions by which they improve the efficacy of agricultural remedies. Wetting agents such as Biodew are used along with herbicides, fungicides or insecticides to improve the spreading of the spray over the leaf surface. The reason why adjuvants are often required in agriculture is because many chemical remedies contain active ingredients which are not readily absorbed by the plant or do not readily spread on or wet the leaf surface. The chemical formulation of a product is often restrictive, and the compounds required in a formulation may not enhance the activity of the active ingredient, and may in fact reduce it. For this reason, certain remedies are less effective than they could be if an adjuvant were used.

The use of safe agricultural products has also always been a priority to Plaaskem, and it was with this in mind that Biodew was developed for the South African agricultural market. Practically all adjuvants with wetting and spreading properties contain nonylphenol ethoxylates (NPE's). These compounds have been banned in the European Union, and also in South Africa with effect as from April 2009, due to possible harmful effects to humans. Some studies indicate that NPE's can act as hormone mimicking agents. As a precautionary measure the NPE's have been banned to prevent a build-up on crops and in waterways. With this in mind, the Plaaskem Research and Development Team started work some time ago on a new range of adjuvants which are NPE-free.

Biodew (Reg No L8120), a new generation

wetting agent from Plaaskem, does not contain NPE's and is therefore safe to use on crops destined for the export market as well as crops grown for local consumption. Biodew is recommended for use with fungicides, insecticides and herbicides.

Penetrating agents or super wetters, on the other hand, assist in the uptake of the chemical into the plant. Examples are Tronic and Sylgard. Acidifying agents such as Bladbuff 12 decrease the pH of a spray mixture, thereby increasing the life of most agrochemicals dramatically. Bladbuff 12 has additional benefits in the spray tank by binding harmful salts in the water, improving wetting and spreading on the leaf surface and improving penetration of the spray mixture into the leaf.

Tronic is a patented Plaaskem adjuvant and is without doubt one of the most trusted adjuvants for the application of herbicides in agriculture. Tronic also has retention, wetting and spreading properties, which rapidly and aggressively moves through the waxy cuticle causing stomatal flooding, and is used on a large scale to increase the efficacy of both contact and systemic herbicides, including SU's, glyphosate and paraquat formulations. Tronic contains 11 different components (some of which are anionic, cationic and non-ionic), each with a specific function. Numerous field trials have shown that the addition of Tronic to an

herbicide spray mixture dramatically improves the efficacy and kill time of herbicides. The addition of Tronic in specific situations is endorsed by major multi-national companies. Tronic is one of only two adjuvants on the market in South Africa for which a full toxicological report is available. The other is Bladbuff 12.

Plaaskem has a full range of plant protection, and nutritional products for the farmer, as well as the NPE-free adjuvants with which these products should be used for optimal yield and quality of the crop.

