

## **Nisa-85 (Non Ionic Spray Adjuvant)**

### **Multipurpose Spray Adjuvant**

Nisa-85 work to improve the performance of pesticides do so by enhancing the reaction of the pesticide solution when it comes into contact with the leaf surface. Nisa-85 helps reduce surface tension to allow a pesticide to cover, penetrate and/or adhere to the leaf's surface depending on whether they have a non-ionic charge.

#### ➤ **Spreaders :**

In order for many pesticides to perform to their full capacity, they must thoroughly coat all parts of the target plants. An even coating is extremely important for contact pesticides. However, because most pesticides are applied using water as the carrier, surface tension causes spray solution droplets to slide off of plant surfaces, leaving areas uncovered. Nisa-85 that reduce the surface tension of spray solution droplets to the point that they can spread and blend together to uniformly coat plant surfaces, avoiding costly runoff of spray material.

#### ➤ **Stickers :**

Once a pesticide has been applied to a plant's surface, it must stay there long enough to perform its function. Rainstorms, fog, irrigation water and other environmental circumstances can cause pesticides to wash off before they have had a chance to work to their full potential. Nisa-85 that help pesticide spray solution droplets cover and adhere firmly to plant surfaces and resist being washed off.

#### ➤ **Penetrants :**

Many pesticides must be able to penetrate into a plant's cuticle in order to perform effectively. This is not easy for pesticides to do because most leaves have a hairy, waxy surface that acts as a barrier to the cuticle. Penetrants are spray adjuvants that cause the wax particles on a leaf's surface to stand upright, which opens up passage to the leaf's cuticle. This encourages rapid penetration of the pesticide which allows it to act quicker. Penetrants, because they

allow rapid penetration, also make pesticides less vulnerable to breakdown by ultraviolet light.

➤ **Drift Control Agents :**

Most pesticides are applied to crops by means of some type of spray. The nozzle size, angle and Pressure with which the pesticides are applied can be controlled. However, many of the pesticides spray droplets may not reach their intended target. In fact, most small droplets drift away from the target, especially in windy conditions. This can be a very costly pesticide application problem, because droplets that are not on the intended target are either wasted in the air. Nisa-85 reduces spray mist by increasing the size of the droplets.

➤ **Compatibility Agents :**

Mixing an herbicide, an insecticide, a fungicide and a nutrient together in one tank is an accepted spraying method. The combination of products saves time. One application across the field can increase the number of pests controlled. However, these products are not necessarily compatible and may not mix uniformly. So, the time-saving method could become a costly waste of several products that are unable to perform because they are incompatible with each other.

**Doses:**

- For insecticides/fungicides: - 8 to 10 ml in 15 liter of water.
- For herbicides: - 15 to 20 ml in 15 liter of water.
- Drenching: - 500 ml for 1 acre.