

ModipHy Xtra

water conditioner

DUAL ACTION WATER CONDITIONER

Applying the concept of increased stability in the tank and mobility in the plant, Ilex have developed **ModipHy Xtra**, an advanced water conditioner designed to optimise pH levels in the tank maintaining activity and maximising the uptake and performance of spray solutions in the plant.

When to use

The performance of many pesticides and spray solutions is affected by adverse water conditions. The high pH levels associated with naturally hard water can cause some pesticide materials to undergo degradation or chemical breakdown (known as hydrolysis). In the worst cases this can create losses of up to 50% in activity. High pH can also be a result of the dissolved elements within hard water with cations such as calcium and magnesium reducing the effectiveness of the active ingredient on its intended target.

Including **ModipHy Xtra** in the tank results in a more consistent product performance over a broad range of spraying conditions and crop situations. It is widely compatible and suitable for use with most commonly applied agrochemicals and foliar nutrients.

Key Benefits

- Dual action – in the spray tank and the plant
- Efficient pH reduction
- Improves tank mix compatibility
- Fast acting



How it works

ModipHy Xtra is formulated to improve the chemical and physical properties of the spray solution. Hydrolysis (or chemical breakdown) of pesticides caused by high pH levels starts from the time of mixing, during agitation in the tank and continues until the water has evaporated from the spray droplet lying on a leaf.

To lower the pH of the water **ModipHy Xtra** contains a combination of inorganic and organic acids to sequester and neutralise hard water ions such as calcium, magnesium and bicarbonate minimising their effect on the active ingredients of the spray solution. Buffering agents also stabilise the spray solution against alkaline degradation of susceptible active ingredients.

The adjustment of the spray water pH also facilitates easier mixing and improves the chemical stability between tank-mix partners.

To continue the action after application, the proprietary blend of co-formulants in **ModipHy Xtra** improves coverage, retention and the efficiency of the spray solution in the plant.

www.illex-envirosciences.com



Farmer trials in 2014 have shown the effectiveness of **ModipHy Xtra** in countering the detrimental effects of hard water on herbicide performance.



"Our trials using ModipHy Xtra with the glyphosate gave us a really quick overall kill including far better control of volunteer rape plants."



"We saw brilliant weed kill in only two days by adding ModipHy Xtra in with the herbicide."

Application rates & timings

To be used at the required water rate providing **ModipHy Xtra** is maintained in a concentration range of 0.20 – 0.30% v/v.

Water Hardness

100 - 200 ppm : Add ModipHy Xtra to tank @ 200 ml per 100 l of water (0.20% v/v)

200 - 300 ppm : Add as above to tank @ 250-ml per 100 l (0.25% v/v).

300 + ppm : Add as above to tank @ 300 ml per 100 l (0.30% v/v)

Compatibility

ModipHy Xtra is physically compatible with a wide range of potential tank mix partners. Check compatibility prior to adding to the spray tank.

Mixing Instructions

ModipHy Xtra is formulated as a totally water soluble liquid for ease of use. **ModipHy Xtra** should be added to the spray tank first, in a minimum 50% total water volume followed by the remaining water and any other tank mix partners. Maintain agitation throughout the mixing and spraying operations.

Pack Sizes: 2 x 5L

This product is physically compatible with a wide range of tank-mix partners. Check compatibility prior to adding to the spray tank. Consult your local advisor or Ilex EnviroSciences for specific recommendations. Do not apply in strong sunlight. Efficacy may be affected by crop health, growth stage and weather conditions. Ilex EnviroSciences accepts no liability for damage to treated crops.