

QUESTIONS & ANSWERS

Class Act® NG® adjuvant is a water conditioner, nonionic surfactant and humectant that helps drive herbicide actives into weeds and reduces hard water antagonism for more aggressive control. It's been helping growers enhance herbicide efficacy for more than 20 years, but those who are new to the adjuvant often ask these questions.

If you would like more information, please contact your WinField United representative or reference the additional resources listed below.

ADJUVANTS

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Why do I need a water conditioner?

In a spray solution, weak acid herbicides can easily dissociate into anions. These negatively charged molecules are attracted to positively charged mineral salts. Plants do not easily absorb the bound salt-herbicide complex, so herbicide efficacy is reduced if the spray water isn't conditioned.

Water conditioners are formulated to help prevent hard water mineral antagonism of weak-acid herbicides in a spray tank mix. Cations in the soil or on a leaf can also bind to herbicide particles, so water conditioners also help block those interactions to improve herbicide uptake.

Why is ammonium sulfate (AMS) included in the adjuvant?

AMS provides two distinct benefits. The sulfate conditions water, preventing hard water antagonism, while the ammonium helps improve pesticide uptake into the plant. AMS is recommended anytime you're putting weak-acid herbicides into the tank, such as glyphosate, glufosinate, 2,4-D choline, 2,4-D amine, clethodim and PPO inhibitors.

What benefit does the nonionic surfactant provide?

The nonionic surfactant in Class Act NG adjuvant improves the spreading and sticking of the herbicide to improve plant absorption and metabolism, resulting in faster and more effective weed control.

What is the CornSorb technology in Class Act NG adjuvant?

CornSorb technology is a humectant made from high fructose corn syrup that helps the spray solution land and stick to the leaf surface to

increase uptake. It also helps delay droplet drying on the leaf for improved uptake as well.

Will adding Class Act NG adjuvant plug up my nozzles?

Class Act NG adjuvant contains pre-dissolved liquid AMS to alleviate sedimentation and nozzle plugging in the sprayer.

If Class Act NG adjuvant has been around for more than 20 years, how does it stand up to modern spray applications?

Class Act NG adjuvant is continually tested at the WinField United Innovation Center and through the Answer Plot® system. In trial after trial, Class Act NG adjuvant continues to have an impressive impact when included in spray tank mixes, helping increase herbicide uptake and metabolism for a quicker, more complete weed kill.

What data do you have to back this adjuvant's performance?

Research teams at the WinField United Innovation Center in River Falls, Wisconsin, have been testing and collecting data on Class Act NG adjuvant performance for more than two decades. This has led to years of data, images and videos proving its impactful performance.

We've also partnered with third-party research teams to evaluate its efficacy. In a Colorado State University study, velvetleaf uptake of Roundup WeatherMAX® was evaluated through two treatments: one used AMS alone and another used Class Act NG adjuvant. The results showed 2.1x greater uptake with Class Act NG adjuvant than AMS alone.¹