

What is Extract Powered by Accomplish® (Extract PBA)?

Extract PBA (6-0-0-13S) is a biocatalyst specifically formulated to maximize nutrient release from crop residues. It combines the powerful biochemistry of Accomplish® LM with the C:N ratio-balancing power of ammonium thiosulfate (ATS). These technologies accelerate nutrient release from crop residues through expedited residue decomposition, allowing the nutrients to re-enter the soil profile for the next crop's use. By applying Extract PBA post-harvest or in the spring, growers can release the nutrients locked up in crop residue to get more ROI out of their original nutrient investment and benefit the next season's crop.

How does Extract PBA deliver ROI and other benefits to growers?

By increasing residue decomposition, Extract PBA improves planting conditions and expedites nutrient release from the previous crop's residue. This may result in a more even emergence, a healthier stand and the potential for increased yields.

What types of residue can Extract PBA be used on?

Extract PBA can be used in any residue situation, including:

- Corn going to soybeans
- Wheat going to soybeans
- · Wheat to wheat acres
- No-till/minimum till corn on corn acres
- Other crops planted in heavy residue from the previous harvest

How does Extract PBA work?

The Accomplish LM biochemistry in Extract PBA jump starts the process of residue breakdown and decomposition. Because the biochemistry in Extract PBA works independently of microorganisms in the soil system, nutrient release through residue decomposition still occurs during colder temperatures. This biochemistry is complemented by ATS, which provides nitrogen and sulfur to enhance microbial activity in the system, while also lowering the pH on the residue's surface. The combination of Accomplish LM and ATS helps optimize residue breakdown and nutrient cycling, which can result in warmer soil temperatures in the spring, easier plantability and more even crop emergence.

How does Extract PBA affect the C:N ratio in the soil, and why is that important?

The C:N ratio plays an important role in assisting microbial breakdown of crop residue for nutrient recycling. The ATS, combined with the label-recommended use of UAN, helps balance the C:N ratio in the soil, expediting microbial growth and thereby breaking down crop residue more quickly. Without the addition of N to the system, microbes will scavenge N from within the soil system, resulting in nutrient immobilization. A balanced C:N ratio combined with the biochemistry in Extract PBA creates an optimal environment for microbial growth, residue breakdown and nutrient release.

When should Extract PBA be applied - soon after harvest, or later, closer to planting?

Extract PBA can be applied any time after harvest. It can be applied on its own, with fall burndown, or with spring liquid fertilizers or burndown applications. Fall applications will give the product maximum time to release nutrients, but either application timing can provide a benefit.

What is the suggested application rate and carrier volume for Extract PBA?

For both residue management and pre-emergence applications, apply Extract PBA at 1-2 gallons per acre. It is recommended to apply Extract PBA with at least 1 gallon of UAN. The recommended carrier volume for Extract PBA is a minimum of 10 gallons per acre. DO NOT use Extract PBA in-furrow or 2x2. Please see the product label for full application information.

When should I use the 2 gallon application rate?

The higher rate is recommended if a grower is achieving above average yields or harvesting high-residue crops with high C:N ratios. In other cases, a grower can start with the 1 gallon rate.

It is recommended to use at least 1 gallon of UAN with an Extract PBA application. When should a higher rate of UAN be used?

A higher rate of UAN can be considered in situations with a very large amount of crop residue with a high C:N ratio and big bushels. An example would be a corn on corn scenario at 250+ bushels per acre, or wheat on wheat at 100+ bushels per acre.

What happens if I don't apply nitrogen with an application of Extract PBA?

The product is effective with or without additional nitrogen. However, nitrogen can help to further speed the process.

What is the fate of the nitrogen released from the residue after an Extract PBA application?

Much of the nitrogen that is made available should stay available for the next crop. Always keep in mind that any nutrients released may be subject to loss under certain conditions.

How many pounds of sulfur are found in Extract PBA?

In 1 gallon of Extract PBA, there are approximately 1.3 lbs of sulfur.

Can I use Extract in furrow or 2x2? Will the ATS in the product harm my seedlings?

Extract PBA should only be used as a broadcast application. Do not use Extract PBA in furrow or 2x2 at planting due to the risk of seedling injury from ATS in the product. For in furrow or 2x2 applications, Accomplish LM is the recommended product for enhancing the availability and uptake of applied nutrients and nutrients already present in the soil solution.

What is the ideal outdoor temperature range for Extract PBA?

Temperatures above 50 degrees Fahrenheit are always ideal for residue breakdown, but the Accomplish LM biochemistry in Extract PBA will continue to work if temperatures dip below 50 degrees F, even if they reach the sub-zero level. Extract PBA can also be applied in the spring with pre-emerge applications if a grower can't get out in the fall.

Can Extract PBA be applied with a burndown application? Is it compatible with glyphosate and other herbicides?

Yes. With Extract PBA, growers do not have to make a special trip across the field. Extract PBA can be tank mixed with herbicides, including glyphosate, and applied with fall or spring burndown. There are no known compatibility issues, but a jar test is always a recommended practice.

Will Extract PBA work in drier climates, where corn stalks are generally still golden in the spring?

The product technology in Extract PBA has been used in drier climates with good results. Growers in this situation may want to increase the product rate and carrier volume, because there is not as much moisture in their system.

Some growers like to add a few gallons of molasses or sugar to their residue application. Can Extract PBA be used with molasses or sugar?

The addition of molasses or sugar, while not necessary, should not affect product performance. Although we don't promote an application of molasses with Extract PBA, there are no known compatibility issues.

Can Extract PBA be applied aerially?

Yes. There are no known issues with an aerial application. As the application rate is at least 10 gallons per acre final volume, this should be clearly communicated to the pilot.

Does Extract PBA work with different tillage practices?

Extract PBA is beneficial in all tillage practices, from conventional to no-till, but will provide a greater benefit where more residue is left on the surface after harvest. Residue can cause issues with spring soil temperatures, plantability and crop emergence. Extract PBA offers growers an excellent, cost-effective way to increase residue breakdown, which allows recovery of more of their previous crop nutrient investment, regardless of tillage practice.

How long after application of Extract PBA before tillage can be done?

If tillage or mechanical sizing will be done, it can be done immediately before or after an application of Extract PBA. There is no need to wait.

Does Extract PBA need to make soil contact for best results?

Extract PBA should be applied directly to residue for optimal nutrient release from the crop residue. Extract PBA will also help to release soil nutrients when it enters the soil profile.

Can Extract PBA be used on corn stalks that are going to be used for grazing livestock?

Treated residue can be grazed. However, because this is a liquid application that contains nitrogen, growers should check local regulations related to nitrogen considerations.

Where is Extract PBA currently registered?

Extract PBA is available in the United States and is registered in most states. Please check the Agrian website at www.agrian. com (search "Extract 6-0-0" on the label lookup page) for specific state registration information.

Where can I purchase Extract PBA or find more information?

For more information or to purchase Extract PBA, visit your local Nutrien Ag Solutions branch or ag retailer. You can also find more information at **www.lovelandproducts.com**.

