

PLANT NUTRIENTS

AdvanSix Sulf-N® Ammonium Sulfate**For Fast-Acting, Long-Lasting Nitrogen,
Give Your Vegetable Crops the Ammonium Advantage**

Vegetable producers are discovering the ammonium advantage from Sulf-N® ammonium sulfate (21-0-0-24S). It's a nitrogen program that gives you the best of both worlds: immediate availability plus long-lasting nitrogen.

"Ammonium sulfate is available when the plant needs it. It's not volatile like urea and the additional sulfur helps the plant use nitrogen more efficiently. On snap beans and sweet corn, we have seen higher yields and higher quality with ammonium sulfate."

Dan Winters

Winters Consulting Service, Pennsylvania

Why ammonium sulfate? Roots absorb both ammonium and nitrate. But only ammonium is readily available for root uptake and stays available while other nitrogen (N) forms – like nitrate and urea – are subject to loss from volatilization, leaching and denitrification.

"Ammonium sulfate gives us a more efficient form of nitrogen. It doesn't volatilize like urea and it stays available in the soil for a longer period of time. On sweet corn, anywhere from 50 percent to 100 percent of our nitrogen comes from ammonium sulfate. It also works well on snap beans, cucumbers, and peppers."

George Umholtz

Crop Production Services, Pennsylvania

Sulfur Bonus

Sulf-N® ammonium sulfate also gives you the benefit of sulfur. More soils are running short of this protein-forming nutrient due to anti-pollution regulations that have reduced sulfur dioxide emissions from industry.

"We like to use one pound of sulfur for every 10 to 15 pounds of nitrogen on sweet corn. Sulfur, like nitrogen, is important for protein formation and sugar production, especially in sweet corn. We also use ammonium sulfate on dry beans, snap beans, cabbage, potatoes and processing peas. Experience has shown us that the nitrogen is both readily available and longer-lasting than other nitrogen sources."

Don Jones

GROWMARK FS, Inc., New York

More Ammonium Advantages

With Sulf-N® ammonium sulfate, you can also count on these ammonium advantages:

- Improved uptake of phosphorus and micronutrients.
- Enhanced root safety. (Unlike urea, ammonium sulfate does not release toxic ammonia.)

"On dry beans and sweet corn, we use ammonium sulfate in starter blends to supply nitrogen and sulfur. It's safe to the roots and much more compatible with other fertilizers. Plus, ammonium sulfate lowers the pH in the starter zone, which makes phosphorus and micronutrients more available."

Jack Aarts

Sylvite Agri-Services LTD., Ontario

"We use ammonium sulfate in the planter mix on all kinds of vegetable crops. It makes phosphorus and micronutrients more available in early-planted, cold soils. On dry beans, we have also observed that the sulfur from ammonium sulfate accelerates emergence and improves resistance to white mold."

Greg Patterson

A&L Canada Laboratories Inc., Ontario

Field Tested, Performance Proven

In university research, ammonium sulfate has increased yields of many vegetable crops, including potatoes, sweet corn, cabbage and kidney beans.

"We use ammonium sulfate on virtually every vegetable crop grown in the mid-Atlantic region. Ammonium sulfate gives us a stable form of nitrogen that resists volatilization and is gentle on the crop. Plus we get a readily available form of sulfur. In side-by-side comparisons, we have seen that ammonium sulfate out yields other nitrogen sources and gives us a deeper, richer color. By having ammonium sulfate in our

fertility package, we are able to utilize phosphorus, which is abundant in our soils, and micronutrients better. I believe we will continue to see increasingly better yield responses to ammonium sulfate as we continue to clean up the air and reduce acid rain."

*Denis Shaffer GROWMARK FS, Inc.,
New Jersey/Delaware*

Fast-acting, long-lasting Sulf-N® ammonium sulfate is compatible with many other fertilizers and is ideal for preplant, starter and sidedress applications.

References

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- Chien, S. H., M. M. Gearhart, and D. J. Collamer. 2008. The effect of different ammonical nitrogen sources on soil acidification. *Soil Science* 173: 544-551.
- Chien, S. H., R. L. Kallenbach, and M. M. Gearhart. 2010. Liming requirement for nitrogen fertilizer-induced soil acidity: A new examination of AOAC Guidelines. *Better Crops* Vol. 94, No. 2: 8-0.

Page 2 of 2

Contact AdvanSix

To learn more about the benefits of Sulf-N® Ammonium Sulfate, visit AdvanSix.com or SulfN.com or call: **1-844-890-8949** (toll free, U.S./Can.) **+1-973-526-1800** (international)

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