



Helping crops absorb the nitrogen they need **for longer**

AdvaNShield is a dual inhibitor utilising proven and UK trialled Nutrisphere-NL technology from partners Verdesian Life Sciences, Nitrasol **AdvaNShield** keeps your nitrogen and yields where they belong whilst reducing the three ways Nitrogen can be lost to the environment.

Compatible with all Nitrasol Nitrogen & Nitrogen Sulphur liquid grades, **AdvaNShield** is supplied as a finished product into your tanks with a long shelf life, taking the hassle out of adding at the point of application.



Benefits

Yield

4% yield increase compared to standard UAN / AN*

Environmental

Up to 24% reduction in nitrate leaching / 54% average reduction in Nitrous Oxide Emissions

Compatibility

Unlike solid urea inhibitors, AdvaNShield works with sulphur grades

Technology

AdvaNShield is an itaconic copolymer. Applied with UAN fertiliser it does not effect soil bacteria

*Average over 62 trials (2017-19) in France / Poland & UK



POWERED BY
NutriSphere-NL
for Liquid Nitrogen Fertiliser

Mode of Action

AdvaNShield is an ionic compound and fully water soluble,

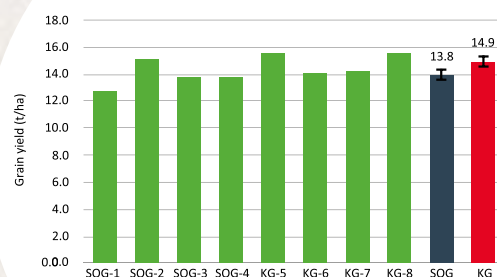
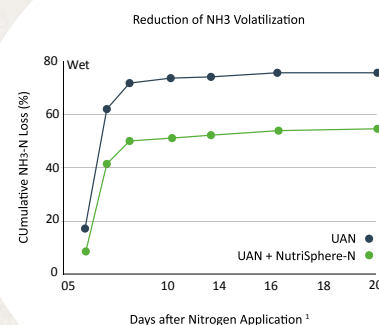
- It does not react with water, thus remaining intact and effective.
 - Dissolves evenly without requirement for stirring.
 - The technology in AdvaNShield liquid is a 'long chain' water soluble compound.
- This means that:
- AdvaNShield keeps the Nitrogen where it is needed for longer, increasing efficiency, yield and crop quality.
 - Due to the large molecule size, only the essential required nutrients are taken up by the plant.
 - There are no residues and AdvaNShield is soil safe, protecting essential bacteria, earth worms, other soil life, fish, flora and fauna.

NutriSphere-NL plays a significant role in reducing nitrates in water:

Water sample date	Rainfall events (inch mm)	Days after last fertilizer application	"untreated": drain water (ppm)	NutriSphere-NLL: drain water nitrate (ppm)	Δ (%)
09/05/2016	3.5 88.9	2	60.16	35.03	-42
06/04/2017	n.a.	290	91.01	71.5	-21
Total N applied as UAN (kg/ha)			120	120	

Trial Success

Trial work conducted by an NIAB in Norfolk showed significant advantages over untreated liquid fertiliser including **increased grain and straw yield**, **increases in total N uptake** and an overall **significant reduction in nitrate levels** recovered from field drains over a 6 month period.



Increase in straw (+0.8 t/ha) and grain yield (+1.1 t/ha) at kg sites with Nutrisphere- NL

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Yield and Grain N content were higher, on average with NutriSphere-NL. Return on Investment estimated at x3.5 after cost of treatment in trials

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