



NITRAIN® nitrogen stabilizer is engineered to reduce nitrogen volatilization by inhibiting the activity of the urease enzyme. Urease is a naturally occurring enzyme in the soil responsible for breaking down urea when moisture and organic matter are present.

HOW IT WORKS:

When granular urea and UAN fertilizers are surface-applied, an enzyme known as urease breaks apart the urea-nitrogen. This process consumes hydrogen ions (H+) in the soil, increasing pH values up to 9.0 or higher in the surrounding soil. As a result, there is a shift in balance between ammonium (NH4+) and ammonia (NH3) increasing the quantity of ammonia gas that can be lost into the atmosphere. When soil pH exceeds 7.5, a considerable amount of soil nitrogen is in the ammonia form.

NITRAIN nitrogen stabilizer reduces the activity of urease enzymes, giving the soil more time to replace the consumed hydrogen ions. When urea-based fertilizers are treated with **NITRAIN** nitrogen stabilizer, it helps maintain the proper pH levels to avoid the volatilization losses that can occur.

APPLICATION RATES:

Nitrogen Fertilizer	Recommended use	MT treated per 9.46 L jug	MT treated per 1000 L tote
Urea (46-0-0)	3.1 L/MT	3.0 MT	322 MT
UAN (Liquid nitrogen			
sources containing 28-32%	1.5 L/MT	6.3 MT	666 MT
urea ammonium nitrate)			

Bottom line, **NITRAIN** nitrogen stabilizer is scientifically proven to significantly reduce nitrogen loss from ammonia volatilization when urea-based fertilizers are surface-applied and not incorporated.





