

TERMS & DEFINITIONS COMMITTEE

SUBMISSION REQUEST FORM

SUBMISSION DATE: 05/22/2015

CONTACT INFORMATION:

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CATEGORY: Undefended Material New Term Soil Amendment Beneficial Substance

SUBMISSION'S PROPOSED DEFINITION:

UAN/Calcium Solutions: Manufactured as liquid mixtures of UAN solution and water soluble calcium solutions containing calcium chloride or calcium nitrate. If sufficient water soluble calcium is added to produce a calcium to urea ratio equal to or greater than 0.2, the resulting product can be considered an enhanced efficiency fertilizer since the soluble calcium mitigates ammonia volatilization loss when compared to UAN, the enhanced efficiency reference product standard.

AOAC OR EQUIVMENT METHOD(S) OF ANALYSIS (IF APPLICABLE):

SUBMITTED RESEARCH: (Minimum of 3 required)

Fenn, LB, RM Taylor and JE Matocha. 1979. Ammonia losses from surface-applied nitrogen fertilizer as controlled by soluble calcium and Magnesium: general theory. Soil Sci. Soc. Am. J. 45:777-781.
Fenn, LB, JE Matocha, and E Wu. 1981. Ammonia losses from surface-applied urea and ammonium fertilizers as influenced by rates of soluble calcium. Soil Sci. Soc. Am. J. 45:883-886.
Robert Mikkelsen, Ammonia Emissions from Agricultural Operations: Fertilizer. Better Crops, Vol 93, 209, No. 4, pp 9-11

ADDITIONAL RESEARCH CITATIONS:

Dr. Ray Lamond, Research Reports, Kansas State University
Dr. Barney Gordon, Research Reports, Kansas State University
Dr. Don Howard, Research Reports, University of Tennessee
Dr. Ron Heiniger, Research Reports, North Carolina State University
Mr. Ron Mulford, Research Reports, University of Maryland