

Acco Tag

Poster #36 This poster shows excellent applicability to the analysis of hydrolyzed feed samples. This poster also contains outstanding data of grain sample analysis. The %RSD for oxidized samples of 1.33% and 0.96% for non oxidized should be noted any time the reproducibility of the method is being scrutinized. A paper by a Chinese collaborator of ours LI Hong Ji will be published in '95 which will provide extensive data about feed analysis.

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Improved Amino Acid Analysis With a Novel Reagent 6-Aminoquinolyl-N-hydroxysuccinimidyl Carbamate

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Amino acid analysis continues to be an important analytical procedure in biochemistry, biotechnology, food and beverage analysis, medicine, nutrition and agricultural sciences. HPLC has largely been responsible for improvements in the procedure in the past decade which have resulted in routine analysis of samples as small as ten picomoles. We have recently developed a novel reagent, 6-Aminoquinolyl-N-hydroxysuccinimidyl carbamate, which combines many of the best features of existing tagging reagents and provides the basis for a significant advance in amino acid analysis performance. The reaction with amino acids is complete within seconds, and the asymmetric urea products are extremely stable and highly fluorescent. The response is linear and recoveries are very reproducible. Detection limits range from 40-350fmol for the hydrolysate amino acids. The reaction is very robust and can be carried out under a wide variety of conditions without compromising analytical accuracy. The pH optimum is broad, and yields are insensitive to the presence of many common buffer salts and detergents, making the reagent ideal for the analysis of samples in complex matrices. Following derivatization the excess reagent is rapidly hydrolyzed to 6-aminoquinoline, whose favorable fluorescence properties permit the direct injection of the derivatization mix without significant reagent interference. This report will demonstrate applications of this new procedure to a variety of samples including peptides, proteins and food-type products.