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N-(2-HYDROXYETHYL) MORPHOLINE HCL SALT CONTENT BY HYDROPHILIC INTERACTION LIQUID CHROMATOGRAPHY (HILIC) WITH CHARGED AEROSOL DETECTION (CAD)

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The utility of charged aerosol detection (CAD) for quantitation has received considerable attention in the pharmaceutical industry. The operating principle of drying and applying a charge to particles in the eluent stream which are directly measured at an electrometer provides a repeatable response when analyzing compounds which lack a UV chromophore. Due to the molecular chemistry of the morpholine alcohol HCL salt, it was found that neither traditional HPLC-UV nor GC-FID analysis was capable of detecting residual amounts present in the drug substance. Further development studies examining different combinations of mobile phases, organic additives, columns (C8, C18, and HILIC) with a CAD detector were performed. It was determined that HCL salt format of a morpholine compound could be successfully analyzed by an HPLC –CAD method with a HILIC column. The method proved capable of controlling residual morpholine alcohol residual in a drug substance.

Biography

D Wang has completed his PhD from Florida International University. He is a Senior Scientist at Alkermes, a global biopharmaceutical company. He has published more than 12 papers and presentations in reputed journals and scientific conferences.

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