

THE EFFECTS OF SFC PREPARATIVE SCALE-UP ON THROUGHPUT, PURITY AND RECOVERY OF AN IMPURITY IN AN API MIXTURE

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Scale-up of SFC analytical methods to preparative scale allows laboratories to generate purified bulk quantities of target compounds. In some laboratories, users are provided with an analytical scale method from which an isolate of a specified purity and quality must be generated within strict timelines. The success of achieving this task depends directly upon the accuracy of the scale-up procedure. In this poster we will describe the preparative scale-up of an analytical scale method for isolation of milligram (mg) to gram (g) quantities (per run) for a mixture of an API and its associated impurities. A cost and time analysis is provided after scale-up to demonstrate the relationship between column size and throughput.

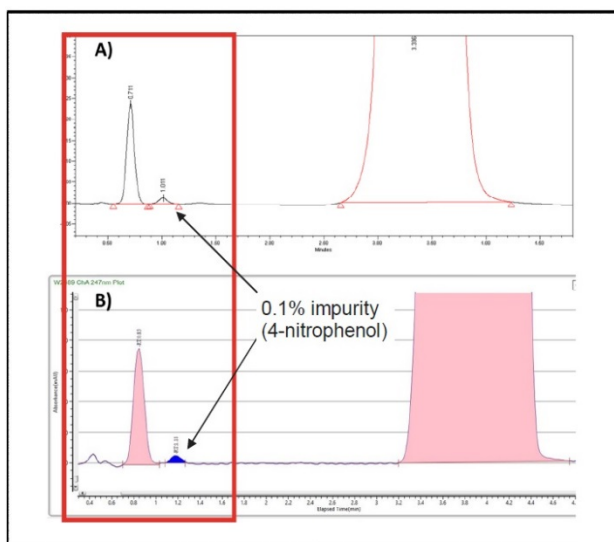


Figure : Red box compares the 0.1% impurity retention time and the peak eluting prior by (A) UPC² using a 4.6mm column by Empower and (B) Prep 150 SFC Mgm with a 19mm column via ChromScope 2.0 at 247nm.