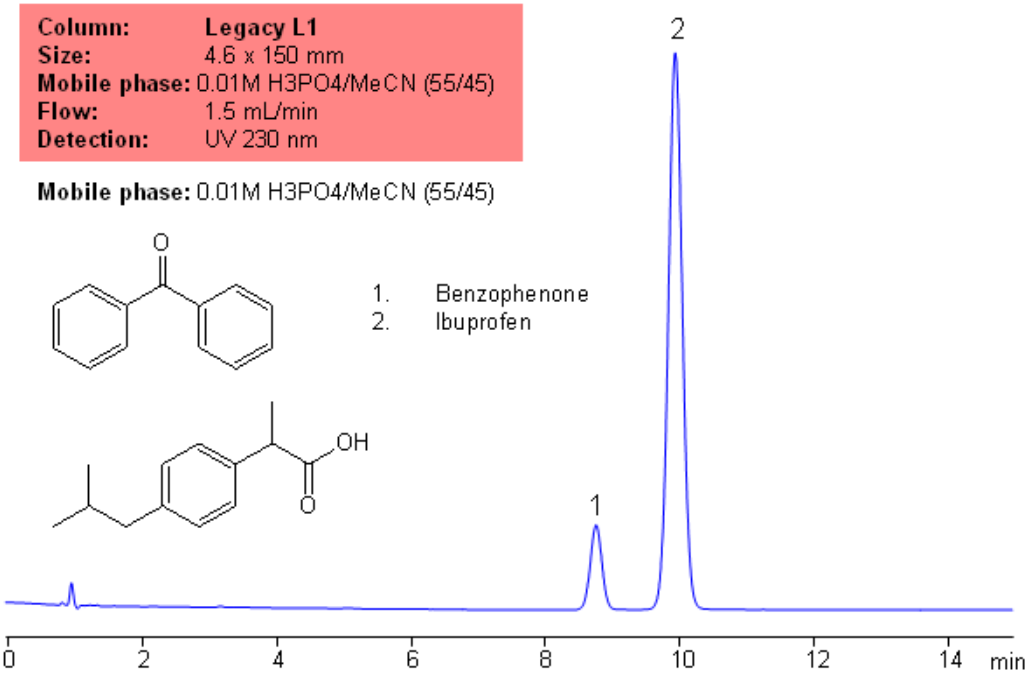
USP Methods for the Analysis of Ibuprofen using a Legacy L1 Column



Application Notes: Ibuprofen is the most commonly used analgesic. It is a vasoconstrictor and fever reducer. According to the USP methods, ibuprofen contains no less than 97% and no more than 103% ibuprofen based on a dried basis. The USP HPLC method for the separation of procainamide was developed on Legacy L1 column according to the US Pharmacopeia methodology. L1 classification is assigned to reversed-phase HPLC column containing Ci18 ligand. Support for the material is spherical silica gel with particles size 3-10 µm and pore size of 100-120 Å. Resolution between critical pairs corresponds to rules and specifications of USP.

Application Columns: Legacy L1 C18HPLCcolumn

Application compounds: Ibuprofen and benzophenone

Mobile phase: .01M H3PO4/MeCN (55/45)

Detection technique: UV

Reference: USP35: NF30

SIELC's family of Legacy columns is based on the United States Pharmacopeia's (USP) published chromatographic methods and procedures. Numerous brands have columns used in USP reference standards and methods. USP has created various designations to group together columns with similar types of packing and properties in the solid phase. SIELC's Legacy columns adhere to these strict requirements and properties, allowing you to easily replace older columns that are no longer available without needing to significantly modify your method or SOPs.

Method Parameters

Column	Legacy L1, 4.6×150 mm, 5 µm, 100 Å
Mobile Phase	MeOH/H2O – 45/55%
Buffer	H3PO4
Flow Rate	1.5 mL/min
Detection	UV, 230 nm

Quelle: https://sielc.com/Application-USP-Methods-for-the-Analysis-of-Ibuprofen-using-a-Legacy-L1-Column