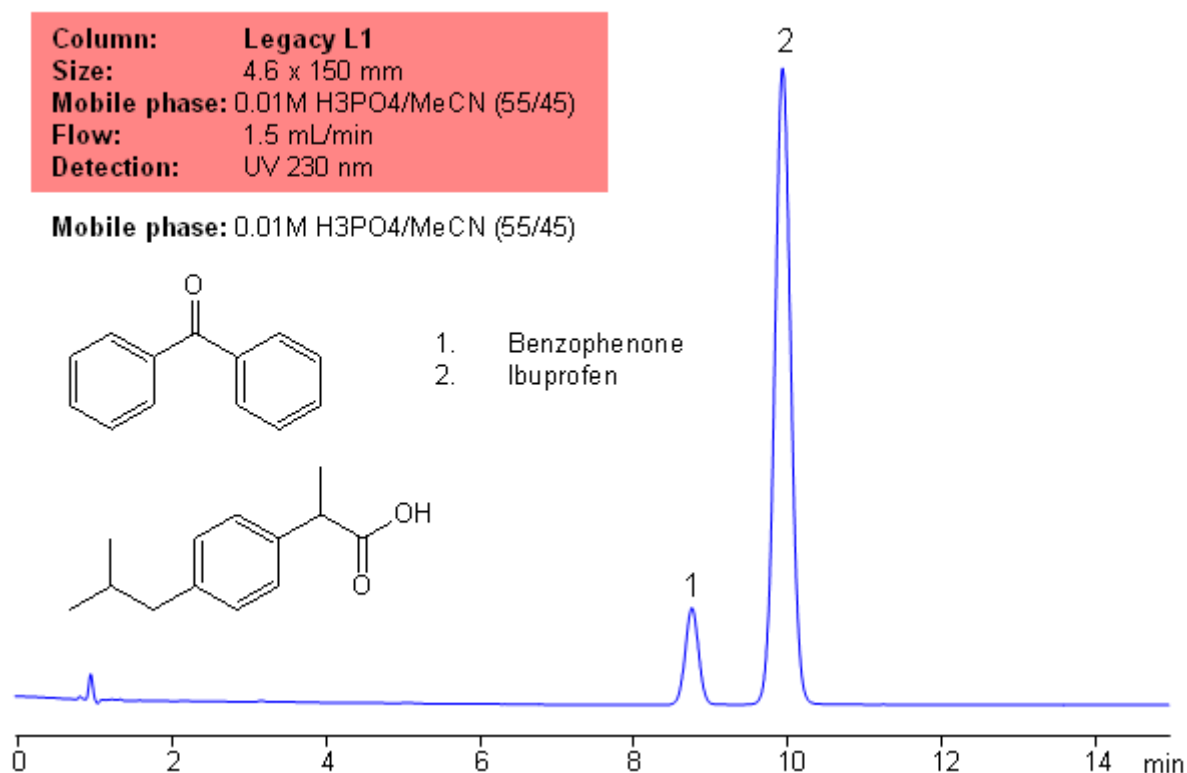


# USP Methods for the Analysis of Ibuprofen using a Legacy L1 Column

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

## Chromatogram



## Description

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 C<sub>18</sub> ligand. Support for the material is spherical silica gel with particles size 3-10 µm and pore size of 100-120Å. Resolution between critical pairs corresponds to rules and specifications of USP.

Application Columns: Legacy L1 C<sub>18</sub> HPLC column · Application compounds: Ibuprofen and benzophenone · Mobile phase: .01M H<sub>3</sub>PO<sub>4</sub>/MeCN (55/45) · Detection technique: UV · Reference: USP35: NF30

## Method Parameters

<b>Mobile Phase</b>	MeOH/H <sub>2</sub> O – 45/55%
<b>Buffer</b>	H <sub>3</sub> PO <sub>4</sub>
<b>Flow Rate</b>	1.5 ml/min
<b>Detection</b>	UV, 230 nm
<b>Class of Compounds</b>	Drug, Nonsteroidal anti-inflammatory drug, Hydrophobic, Ionizable, Neutral
<b>Analyzing Compounds</b>	Ibuprofen, benzophenone

#### HPLC Column Used

**Legacy L1, 4.6×150 mm, 5 µm, 100A**

[Order this column at hplc-shop.de →](https://www.hplc-shop.de)