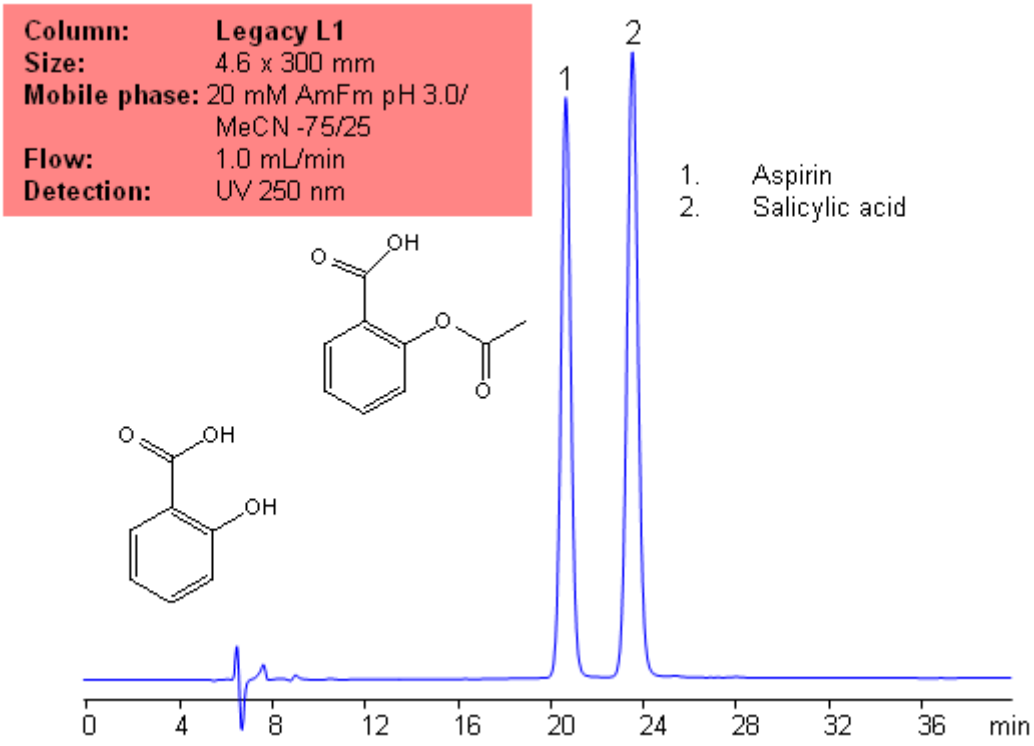
USP Methods for the Analysis of Aspirin (Acetylsalicylic acid (ASA)) Using Legacy L1 Column

https://sielc.com/Application-USP-Methods-or-the-Analysis-of-Aspirin-Using-Legacy-L1-Column

Chromatogram



Description

Application Notes: Aspirin is one of the oldest analgesics. While it is one of the oldests analgesics, it is still widely used today, and is still one of the most common drugs. According to the USP methods, aspirin contains not less than 99.5% and no more than 100.5 percent of aspirin calculate on a dried basis. The USP HPLC method for the separation of aspirin was developed on Legacy L1 column according to the US Pharmacopeia methodology. L1 classification is assigned to reversed-phase HPLC column containing C18 ligand. Support for the material is spherical silica gel with particles size 3-10 um and pore size of 100-120A. Resolution between critical pairs corresponds to rules and specifications of USP.

Application Columns: Legacy L1 C18 HPLC column · Application compounds: Aspirin and salicylic acid · Mobile phase: 20 mM AmFm pH 3.0/MeCN- 75/25 · Detection technique: UV · Reference: USP35: NF30

Method Parameters

Mobile Phase	MeCN – 25%
Buffer	AmFm pH 3.0 20 mM – 75%
Flow Rate	1.0 ml/min
Detection	UV, 250 nm
Class of Compounds	Drug, Acid, Hydrophobic, Ionizable

Analyzing Compounds	Aspirin (Acetylsalicylic acid (ASA))

HPLC Column Used

Legacy L1, 4.6×300 mm, 5 µm, 100A