

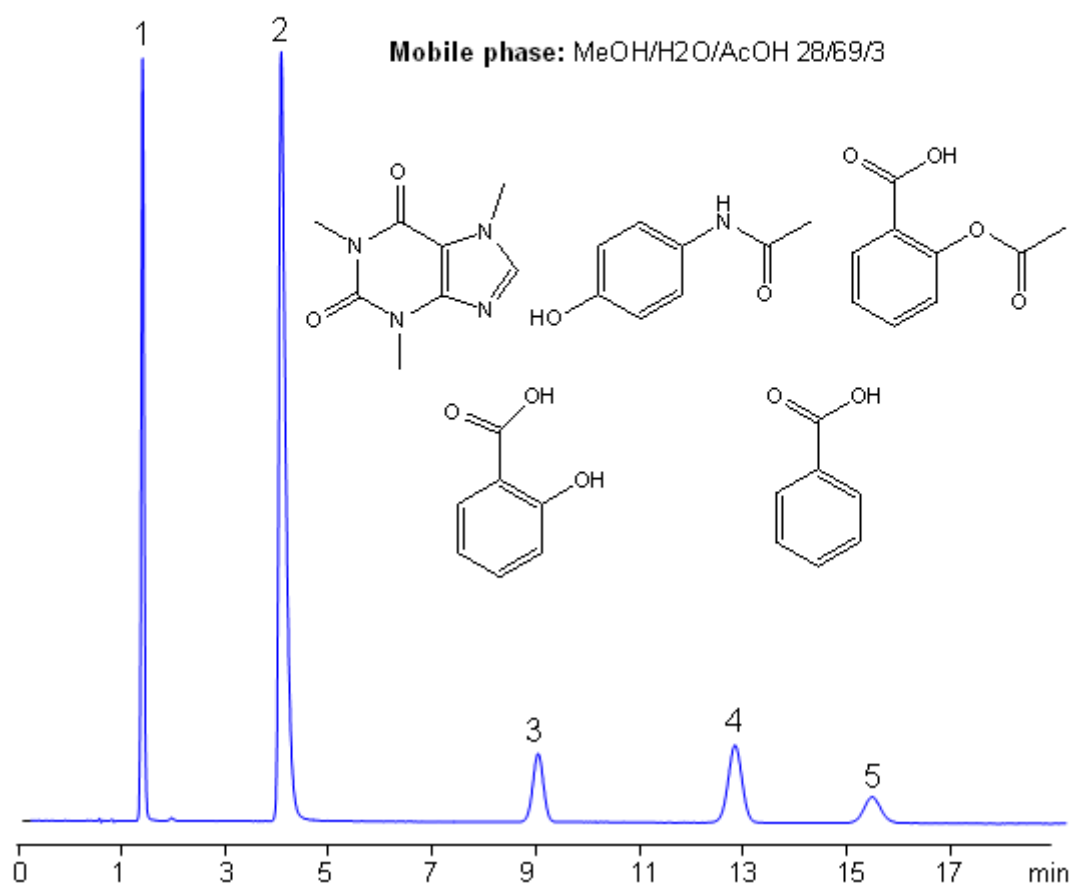
USP Methods for the Analysis of an Analgesic Mixture Using the Legacy L1 Column

<https://sielc.com/Application-USP-Methods-for-the-Analysis-of-an-Analgesic-Mixture>

Chromatogram

Column: Legacy L1
Size: 4.6 x 100 mm
Mobile phase: MeOH/H₂O/AcOH 28/69/3
Flow: 1.0 mL/min
Detection: UV 270 nm

1. Acetaminophen
2. Caffeine
3. Aspirin
4. Benzoic acid
5. Salicylic acid



Description

Application Notes: Acetaminophen, aspirin, and caffeine tablets contain not less than 90 percent and not more than 110 percent of the labeled amounts of acetaminophen, aspirin, and caffeine according to the USP methods. The USP HPLC method for the separation of acetaminophen, aspirin, and caffeine was developed on the Legacy L1 column according to US Pharmacopeia methodology. The L1 classification is assigned to reversed-phase HPLC columns containing C18 ligands. The support material is a spherical silica gel with a particle size of 3-10 µm and a pore size of 100-120 Å. Resolution between critical pairs corresponds to the rules and specifications of the USP.

Application Columns: Legacy L1 C18 HPLC column · Application compounds: Acetaminophen, Aspirin, Caffeine, benzoic acid, and salicylic acid · Mobile phase: MeOH/H₂O/AcOH 28/69/3 · Detection technique: UV · Reference: USP30: NF35

Method Parameters

Mobile Phase

MeOH/H₂O/AcOH 28/69/3

Buffer	AcOH
Flow Rate	1.0 ml/min
Detection	UV, 270 nm
Class of Compounds	Drug, Acid, Hydrophobic, Ionizable
Analyzing Compounds	Acetaminophen, Caffeine, Aspirin, Benzoic acid, Salicylic acid

HPLC Column Used

Legacy L1, 4.6×150 mm, 5 µm, 100A

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