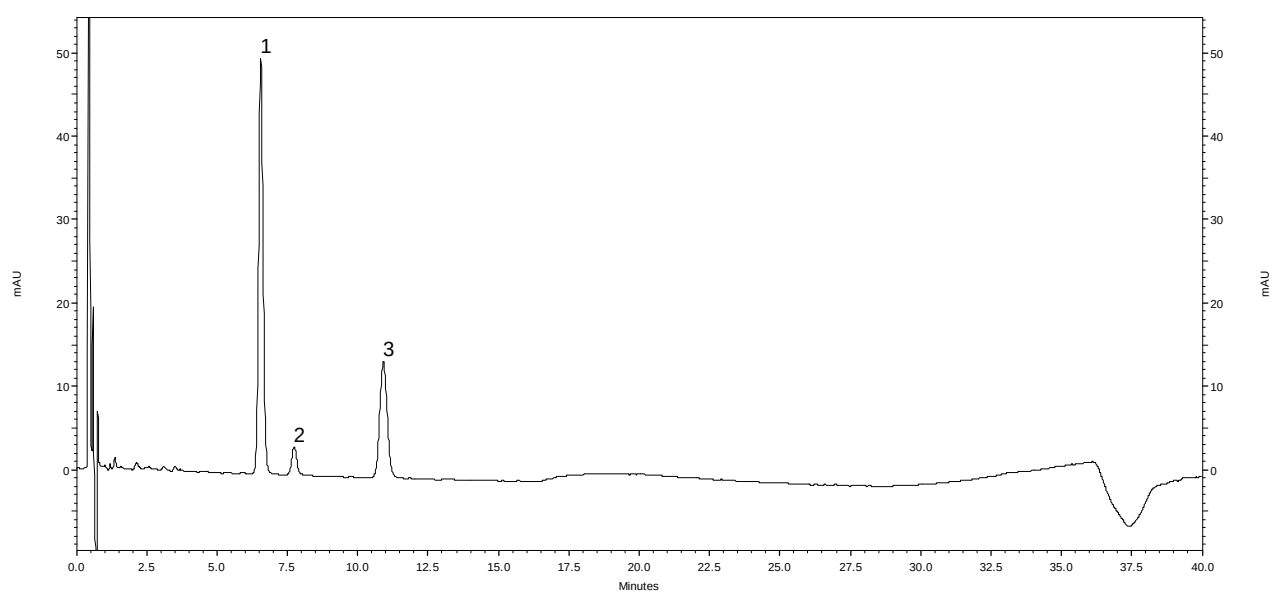


Methylphenidate Tablets – BP 2018

These chromatograms are provided for information only as an aid to analysts and are intended as guidance for the interpretation and application of BP monographs.

Typical chromatogram for solution (4) in the Related Substances test for Methylphenidate Tablets as published in BP 2018.



Peak ID: 1. Impurity A, 2. Impurity C, 3. Impurity B



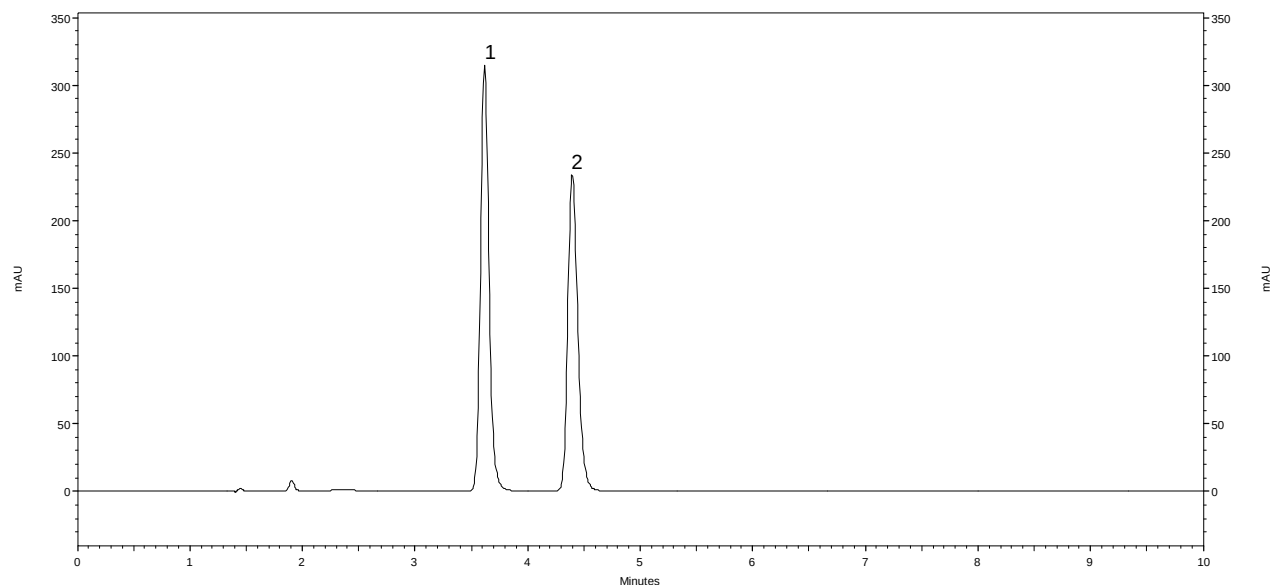
Column : Waters, Symmetry C18 (75 mm x 4.6 mm, 3.5 μ m)
Method Ref. : Related substances for the Methylphenidate Tablets Monograph from BP 2018
Mobile Phase A : 2.16 g of sodium octanesulfonate solution was dissolved in 950 mL of purified water, 1 mL of triethylamine was added and pH adjusted to 2.7 with orthophosphoric acid. This solution was made up 1000 mL with purified water.
Mobile phase B : Acetonitrile
Gradient :

Time (min)	Mobile phase A (%)	Mobile phase B (%)
0	80	20
15	80	20
35	60	40
36	80	20
40	80	20

Diluent : 1.35 g of sodium octanesulfonate solution was dissolved in 950 mL of purified water, 1 mL of triethylamine was added, pH adjusted to 2.7 with orthophosphoric acid and made up to 1000 mL with purified water:Acetonitrile (80:20, v/v)
Flow Rate : 1.3 mL/min
Column Temp : 40°C
Injection Volume : 40 μ L
Detection : UV, 215 nm



Typical chromatogram for solution (3) in the Assay test for Methylphenidate Tablets as published in BP 2018.



Peak ID: 1. Methylphenidate, 2. Phenylephrine

Column	: Sperisorb CN-RP (250 mm x 4.6 mm, 5 μ m)
Method Ref.	: Assay for the Methylphenidate Tablets Monograph from BP 2018
Mobile Phase	: 0.16 % w/v anhydrous sodium acetate solution, pH adjusted to 4.0 with glacial acetic acid (analytical grade): Acetonitrile: Methanol (3: 3: 4, v/v/v)
Diluent	: Mobile phase
Flow Rate	: 1.5 mL/min
Column Temp	: 25°C
Injection Volume	: 10 μ L
Detection	: UV, 210 nm