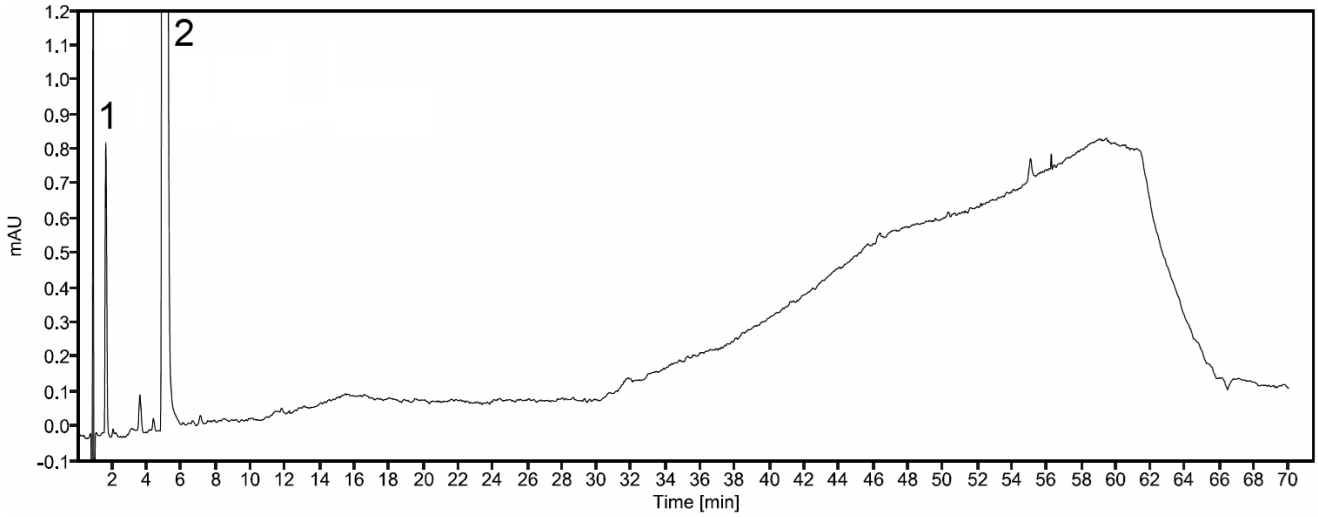
Paracetamol Tablets – BP 2025

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 (5) from the Related Substances test for Paracetamol Tablets as published in BP 2025.

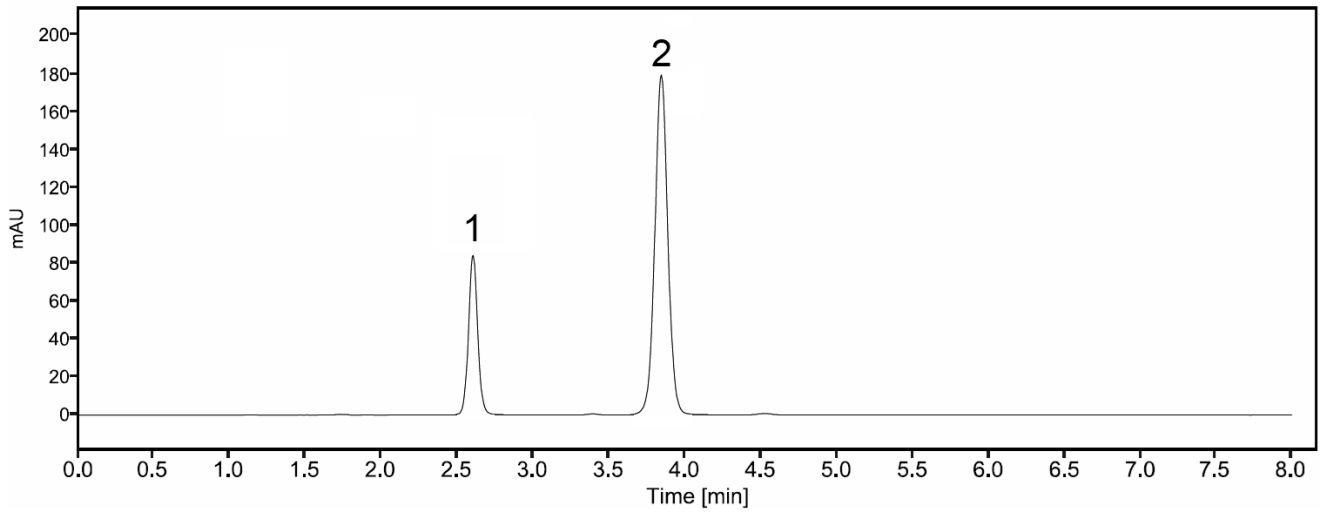


Peak ID: 1: Impurity K. 2: Paracetamol.

Column	Halo C18 (150 mm x 4.6 mm, 5 µm)
Method Ref.	Related Substances for the Paracetamol Tablets monograph from BP 2025
Mobile Phase A	1.7 g/L potassium dihydrogen phosphate and 1.8 g/L dipotassium hydrogen phosphate
Mobile Phase B	Methanol
Diluent	15% Methanol
Flow rate	Refer to gradient table below
Column Temp	30°C
Injection Volume	50 µL

Detection	254 nm			
Gradient				
Time (minutes)	**Mobile phase A (% v/v)**	**Mobile phase B (% v/v)**	**Flow rate (mL/min)**	**Comment**
0 – 1.5	95	5	1.5	isocratic
1.5 – 14.4	95 → 90	5 → 10	1.5	linear gradient
14.4 – 28.8	90	10	1.5	isocratic
28.8 – 57.6	90 → 66	10 → 34	1.5	linear gradient
57.6 – 60	66	34	1.5	isocratic
60 – 65	66 → 95	34 → 5	1.5	linear gradient
65 – 70	95	5	1.5	re-equilibration

Typical chromatogram for solution (3) from the Assay test for Paracetamol Tablets as published in BP 2025.



Peak ID: 1: Impurity K. 2: Paracetamol.

Column	Agilent Zorbax Rx C8 (250 mm x 4.6 mm, 5 µm)
Method Ref.	Assay for the Paracetamol Tablets monograph from BP 2025
Mobile Phase	250 volumes of methanol containing 1.15 g of a 40% w/v solution of tetrabutylammonium hydroxide, 375 volumes of 0.05M disodium hydrogen orthophosphate and 375 volumes of 0.05M sodium dihydrogen orthophosphate
Diluent	Mobile phase
Flow rate	1.5 mL
Column Temp	35°C
Injection Volume	20 µL
Detection	245 nm