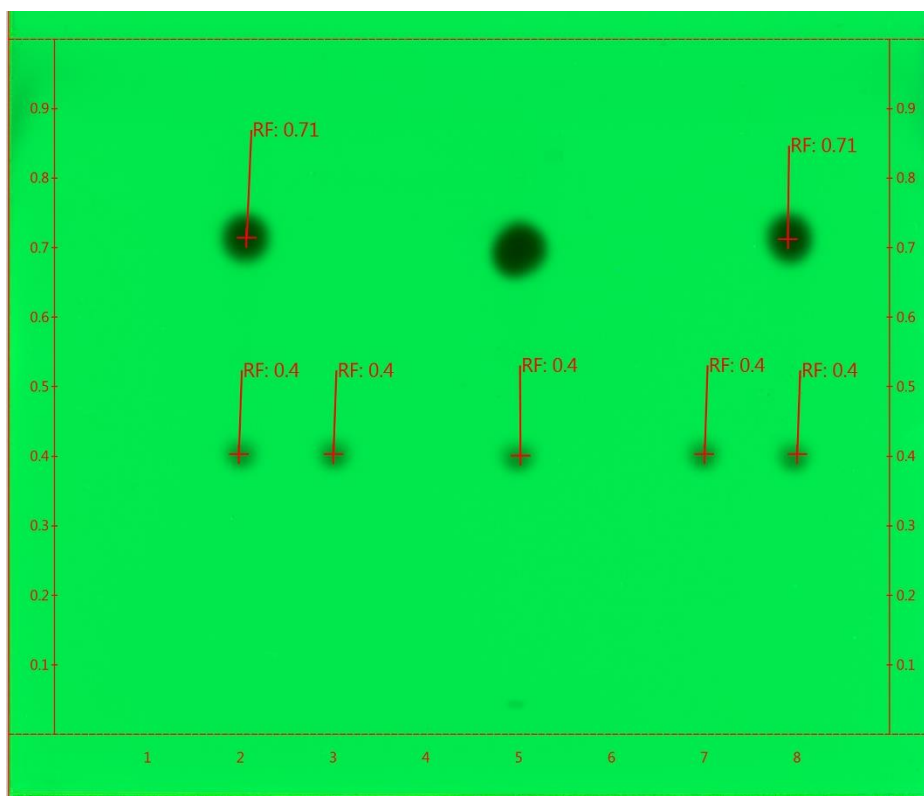




Paracetamol, Codeine Phosphate and Caffeine Capsules – BP 2022

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 the Identification D test for Paracetamol, Codeine Phosphate and Caffeine Capsules by Thin Layer Chromatography as published in BP 2022.

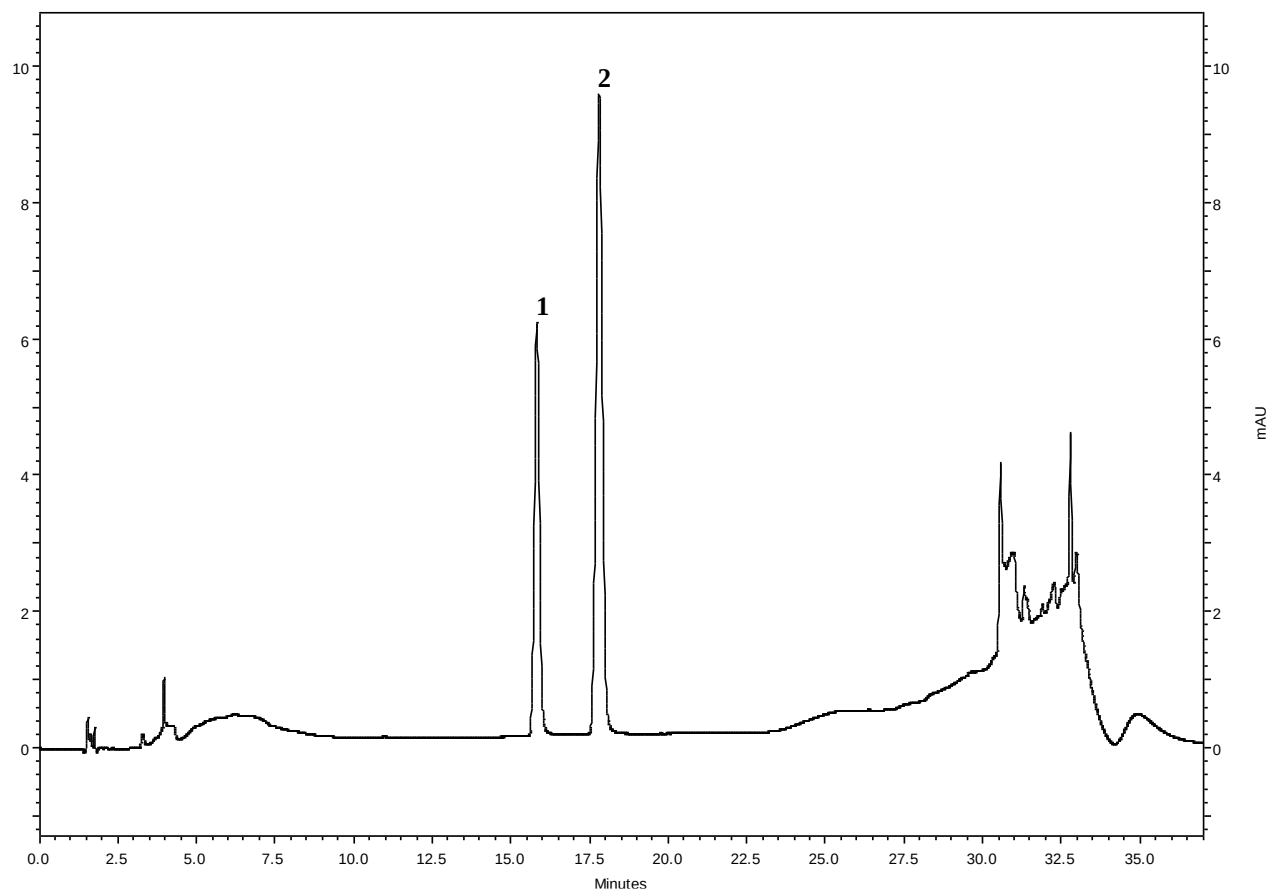


- | | |
|---------|---------------------------------------|
| 1; 4; 6 | Blank |
| 2; 8 | System suitability |
| 3; 7 | 0.65 % w/v caffeine standard solution |
| 5 | Capsule 0.65 % w/v sample solution |

TLC plate	TLC silica gel 60 F254 plate (20 cm × 20 cm)
Plate preconditioning	N/A
Diluent	Methanol
Mobile Phase	Acetic acid : ethanol : water : ethyl acetate (5 : 5 : 5 : 50, v/v/v/v)
Mobile Phase volume	65 mL
Band application	3 mm band size with a spotting volume of 1 µL
Chamber saturation	Minimum 60 minutes at room temperature
Development	150 mm
Development time	78 minutes
Drying time	10 minutes in air
Derivatisation	N/A
Visualisation	Developed plate examined under UV light (254 nm)



Typical chromatogram for solution (3) in the Related Substances test for Paracetamol, Codeine Phosphate and Caffeine Capsules as published in BP 2022.



Peak ID: 1: Codeine; 2: 4'-chloroacetanilide

Column : Kinetex, C18 (150 mm x 4.6 mm, 2.6 μ m)
Method Ref. : Related Substances for the Paracetamol, Codeine Phosphate and Caffeine Capsules monograph from BP 2022
Mobile Phase A : 5 mM sodium octanesulfonate, adjusted to pH 2.2 with orthophosphoric acid.
Mobile Phase B : Methanol R1
Gradient :

Time (minutes)	Mobile phase A (% v/v)	Mobile phase B (% v/v)
0 – 2.5	80 → 70	20 → 30
2.5 – 20	70	30
20 – 30	70 → 20	30 → 80
30 – 32	20 → 80	80 → 20
32 – 37	80	20

Diluent : 0.23 % w/v sodium chloride in a mixture of mobile phase B and mobile phase A (30: 70, v/v).
Flow rate : 0.8 mL/min
Column Temp : 35 °C
Injection Volume : 20 μ L
Detection : 246 nm