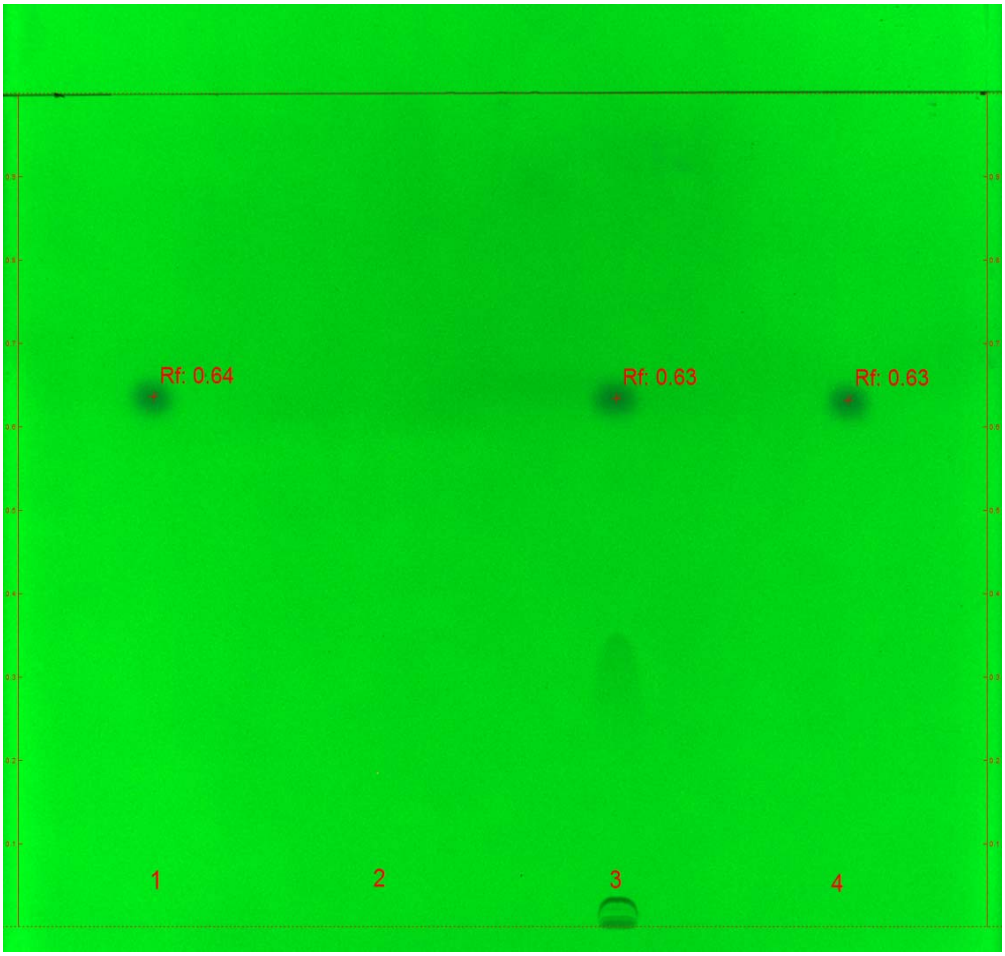
Bendroflumethiazide Oral Suspension – BP 2018

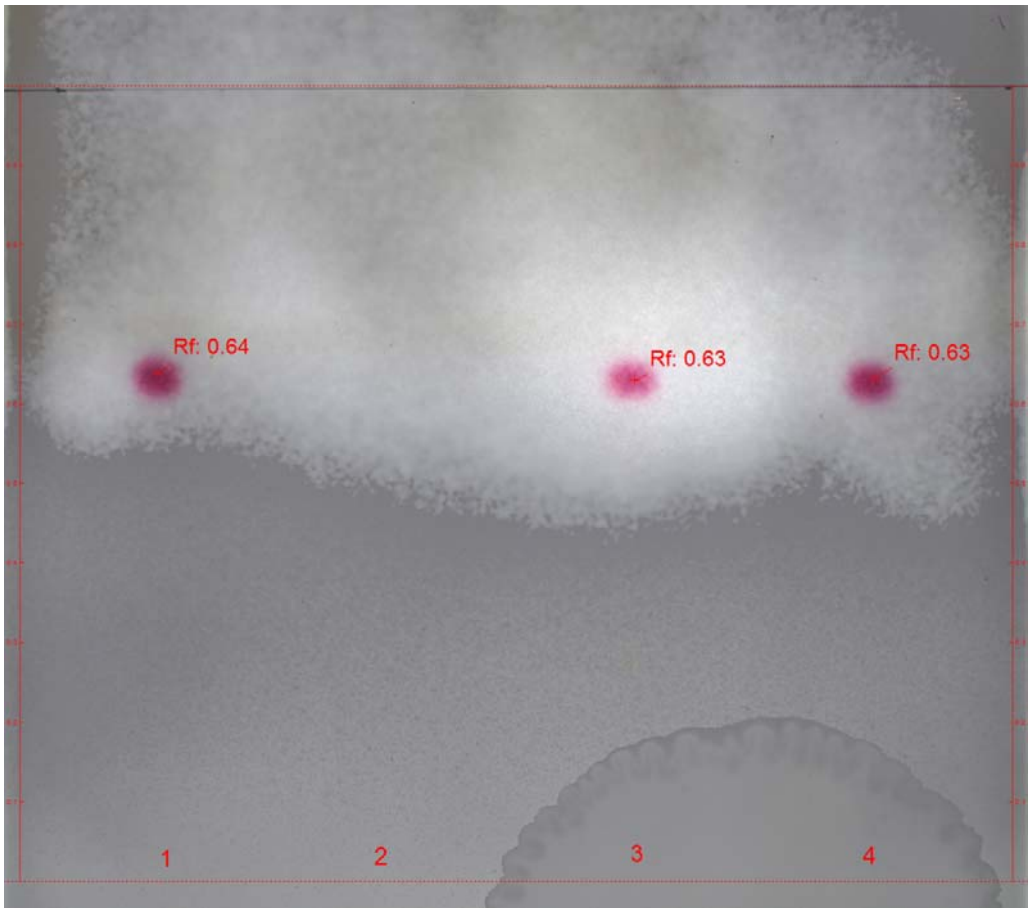
These chromatograms are provided for information only as an aid to analysts and are intended as guidance for the interpretation and application of BP monographs.

Typical chromatograms for the Identification test A in Bendroflumethiazide Oral Suspension by Thin Layer Chromatography as published in BP 2018.

Detection: Developed at 254 nm



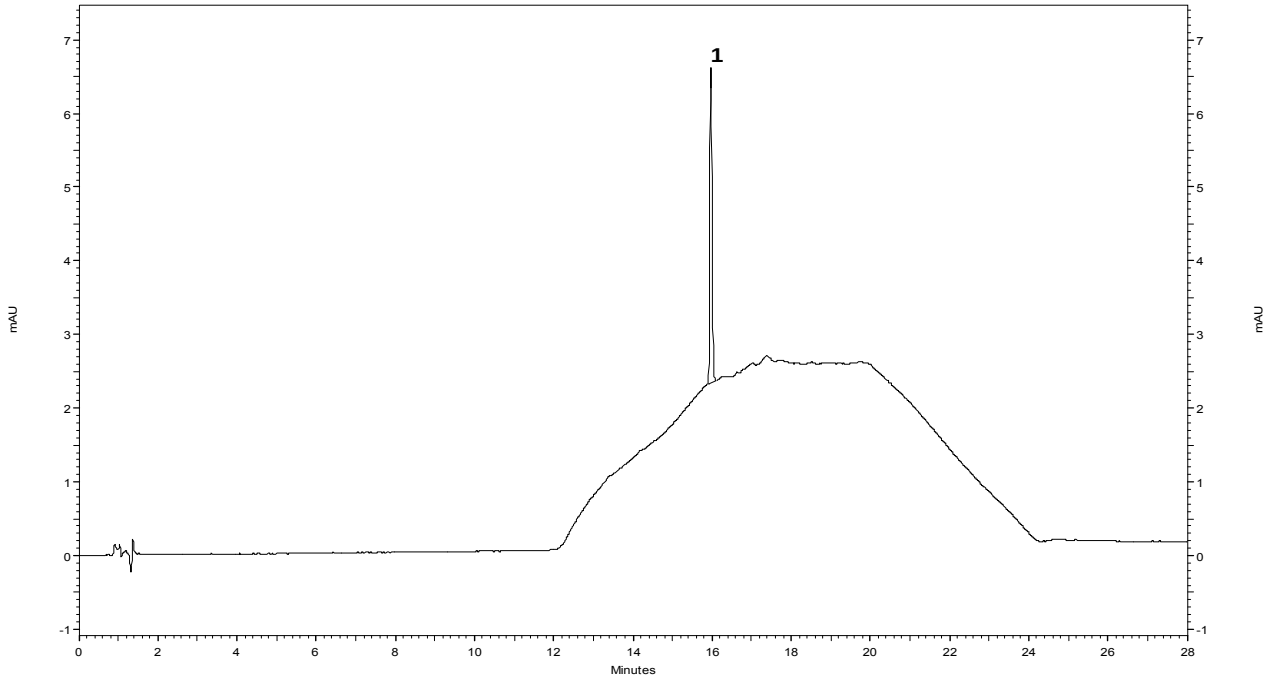
Detection: Developed and derivatised under white light (As per Appendix IIIA, Method I)



1. 0.1 % w/v bendroflumethiazide BPCRS (solution 2)
2. Blank
3. Solution 1
4. 0.1 % w/v bendroflumethiazide BPCRS (solution 2)

TLC Plate:	Merck TLC silica gel 60 F_{254}, 20 cm × 20 cm
Plate preconditioning:	N/A
Mobile Phase:	Ethyl acetate
Diluent:	Acetone
Application:	20 µL of solution (1) and 5 µL of solution (2)
Development:	15 cm
Drying time:	5 minutes at room temperature
Development time:	1 hour

Typical chromatogram for solution (2) in the Related Substances test for Bendroflumethiazide Oral Suspension as published in BP 2018.



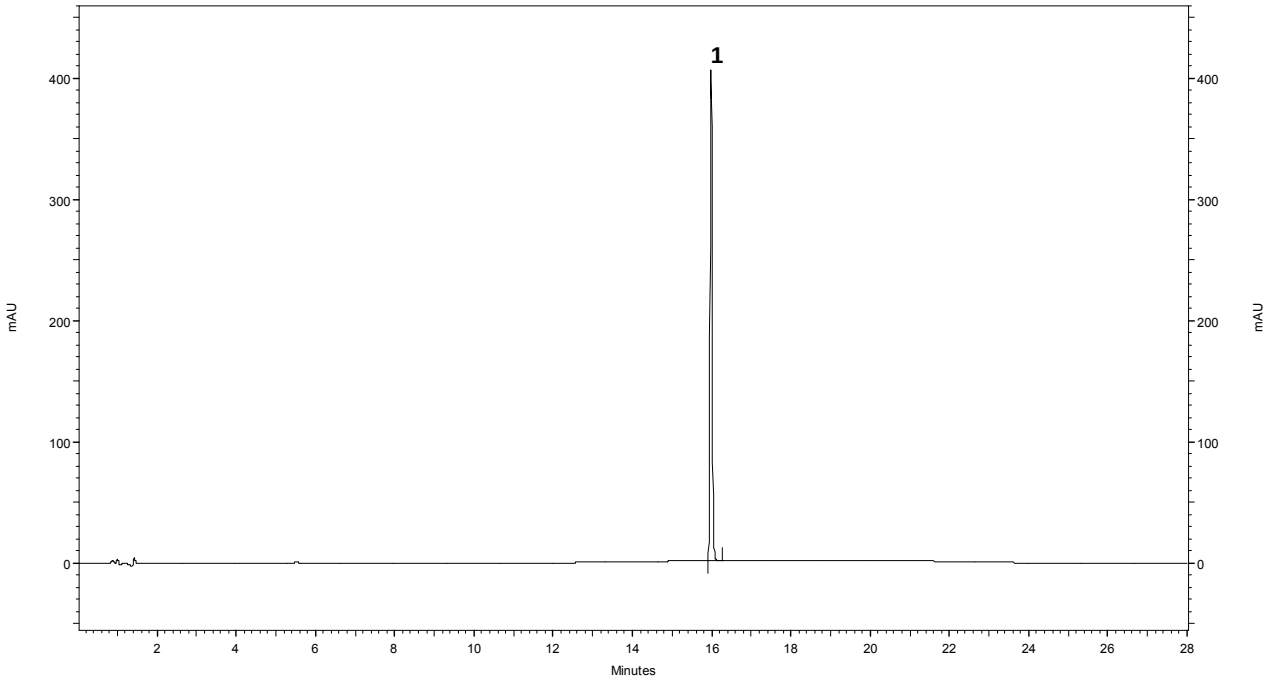
Peak ID: 1: Bendroflumethiazide.

Column : Waters, Sunfire C18 (100 mm × 4.6 mm, 3.5 µm)
Guard column : C18 (4 mm x 3.0 mm, ≥ 3 µm)
Mobile phase A : Acetonitrile : water (4:16, v/v), adjusted to pH 2.0 with orthophosphoric acid
Mobile phase B : Acetonitrile : water (6:4, v/v), adjusted to pH 2.0 with orthophosphoric acid
Gradient

Time (min)	Mobile Phase A (% v/v)	Mobile Phase B (% v/v)
0 - 10	100	0
10 - 14	100 - 0	0 - 100
14 - 18	0	100
18 - 22	0 - 100	100 - 0
22 - 28	100	0

Standard diluent : Mobile phase A
Sample diluent : Methanol : 5 % w/v sodium chloride solution (15:10, v/v)
Flow rate : 1.0 mL/min
Column temperature : 20 °C
Sampler temperature : 4 °C
Injection volume : 10 µL
Detection : UV, 273 nm

Typical chromatogram for solution (2) in the Assay test for Bendroflumethiazide Oral Suspension as published in BP 2018.



Peak ID: 1: Bendroflumethiazide

Column : Waters, Sunfire C18 (100 mm × 4.6 mm, 3.5 µm)
Guard column : C18 (4 mm x 3.0 mm, ≥ 3 µm)
Mobile phase A : Acetonitrile : water (4:16, v/v), adjusted to pH 2.0 with orthophosphoric acid
Mobile phase B : Acetonitrile : water (6:4, v/v), adjusted to pH 2.0 with orthophosphoric acid
Gradient

Time (min)	Mobile Phase A (% v/v)	Mobile Phase B (% v/v)
0 - 10	100	0
10 - 14	100 - 0	0 - 100
14 - 18	0	100
18 - 22	0 - 100	100 - 0
22 - 28	100	0

Standard diluent : Mobile phase A
Sample diluent : Methanol : 5 % w/v sodium chloride solution (15:10, v/v)
Flow rate : 1.0 mL/min
Column temperature : 20 °C
Sampler temperature : 4 °C
Injection volume : 10 µL
Detection : UV, 273 nm