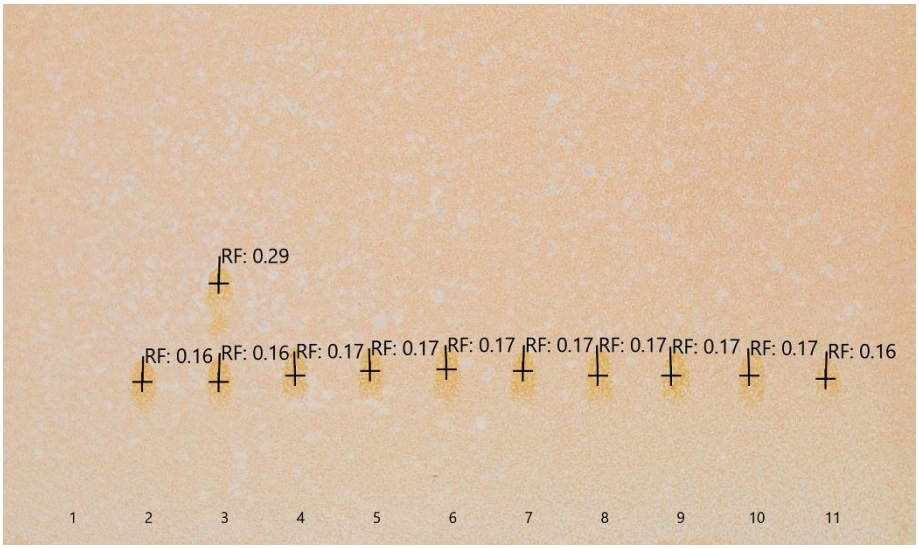
Quinine Sulfate Oral Suspension – BP 2024

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.

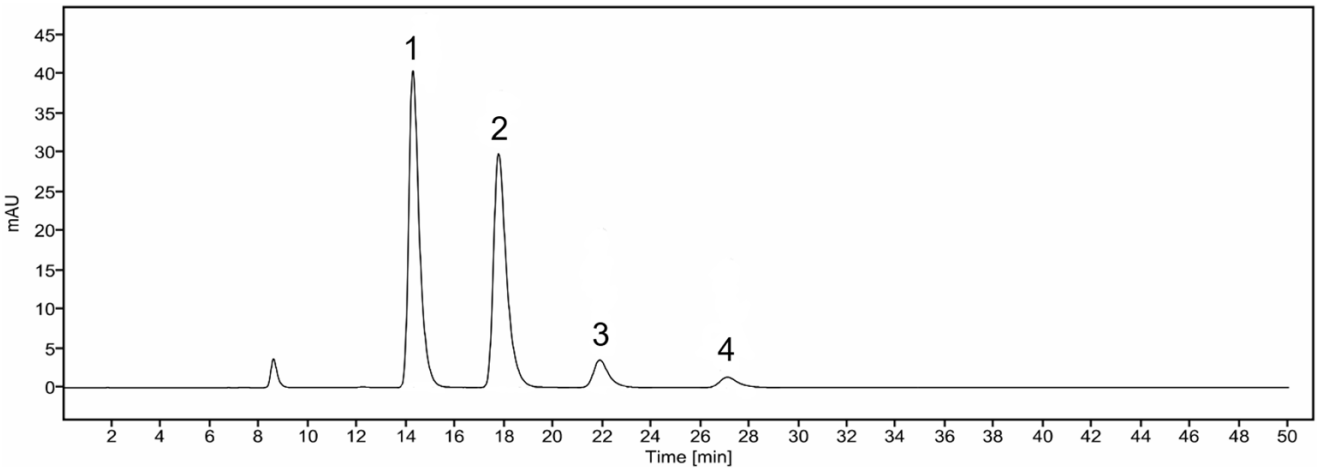
Typical chromatogram for the Identification test for Quinine Sulfate Oral Suspension by Thin Layer Chromatography as published in BP 2024.



1	Blank
2	Solution (2): 1.0% w/v quinine sulfate standard solution
3	Solution (2): 1.0% w/v each of quinine sulfate and quinidine sulfate
4-11	Oral solution sample 1.0% w/v solutions

TLC plate	TLC silica gel 60 precoated plate
Plate preconditioning	N/A
Diluent	1:2 (v/v) Ethanol (96%): Dichloromethane
Mobile Phase	10:20:80 (v/v/v) Diethylamine: Acetone: Toluene
Band application	3 mm band size with a spotting volume of 2 µL
Development	150 mm
Development time	38 minutes
Derivatisation	Spray 1: 0.05M Ethanolic sulfuric acid Spray 2: Dilute potassium iodobismuthate solution
Visualisation	White light

Typical chromatogram for solution (4) in the Other cinchona alkaloids test and solution (3) in the Assay test for Quinine Sulfate Oral Suspension as published in BP 2024.



Peak ID: 1: Quinidine; 2: Quinine; 3: Dihydroquinidine; 4: Dihydroquinine

Column	Agilent Zorbax SB, C18 (250 mm x 4.6 mm, 5 µm)
Method Ref.	Other cinchona alkaloids (and Assay) for the Quinine Sulfate Oral Suspension monograph from BP 2024
Mobile phase	6.8 g of potassium dihydrogen orthophosphate and 3.0 g of hexylamine dissolved in 700 mL of water, adjusted to pH 2.8 with 1M orthophosphoric acid. 60 mL of acetonitrile was added and diluted to 1000 mL with water
Diluent	Mobile phase
Flow rate	1.5 mL/min
Column Temp	25 °C
Injection Volume	10 µL
Detection	316 nm