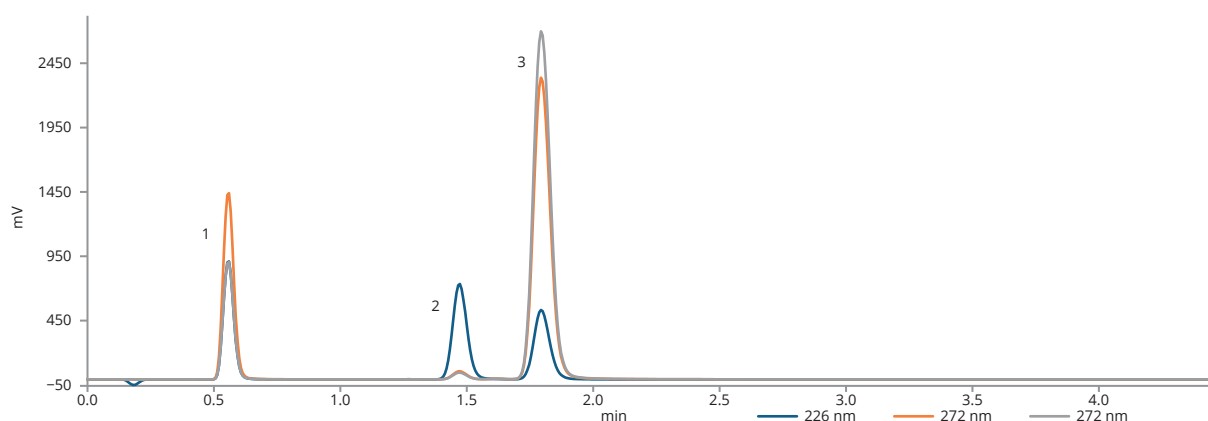


Preservatives in caffeinated beverages

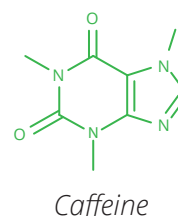
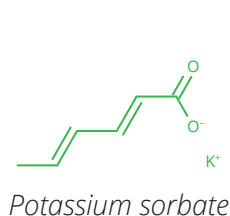
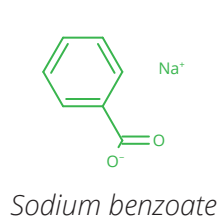
Sodium and potassium salts of benzoic acid and sorbic acid are well-known food preservatives. The permitted amount in food is strictly regulated with the level depending on the food group. As an example, European regulation EC 1333/2008 sets the rules on food additives: definitions, conditions of use, labelling and procedures.

Substance

Sodium benzoate, CAS Number 532-32-1
Potassium sorbate, CAS Number 24634-61-5
Caffeine, Guaranine, Methyltheobromine, Theine,
CAS Number 58-08-2



Standard on ASTRA® HPLC column





Preservatives in caffeinated beverages

Column	ASTRA® C18-HE, 3.0 µm
Dimensions	50 mm × 2.1 mm
Part number	AST-5732-IG21
Mobile phase	51.4 mM Sodium acetate trihydrate (pH 3.8) / ACN 90/10 (v/v) Isocratic elution
Flow rate	1.3 ml/min
Temperature	50 °C
Detection	UV @226 nm (Sodium benzoate), 272 nm (Caffeine), 259 nm (Potassium sorbate)
Analytes	1. Caffeine 2. Sodium benzoate 3. Potassium sorbate