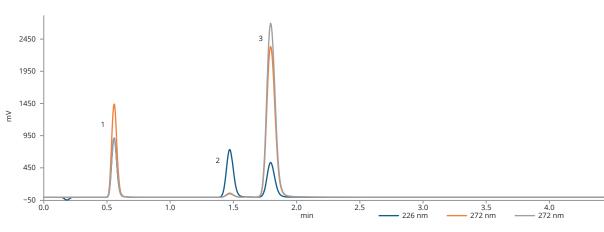
APPLICATION LIST #390

Preservatives in caffeinated beverages

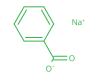
Sodium and potassium salts of benzoic acid and sorbic acid are well-known food preservatives. The permitted amount in food is strictly regulated with the level depending on the food group. As an example, European regulation EC 1333/2008 sets the rules on food additives: definitions, conditions of use,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

Substance

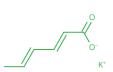
Sodium benzoate, CAS Number 532-32-1 Potassium sorbate, CAS Number 24634-61-5 Caffeine, Guaranine, Methyltheobromine, Theine, CAS Number 58-08-2

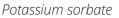


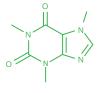
Standard on ASTRA® HPLC column



Sodium benzoate







Caffeine

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APPLICATION LIST #390

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)
Sample	Supelco 37 FAME mix in DCM (dilution 1:10)
Analytes	1. Caffeine
	2. Sodium benzoate
	3. Potassium sorbate

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