

Materials List for:

Determination of Inorganic Arsenic in a Wide Range of Food Matrices using Hydride Generation - Atomic Absorption Spectrometry.

Maria B. de la Calle¹, Vicenta Devesa², Yiannis Fiamegos¹, Dinoraz Vélez¹

¹European Commission, Joint Research Centre

²Metal Trace Element Laboratory, IATA-CSIC

Correspondence to: Maria B. de la Calle at Maria.DE-LA-CALLE@ec.europa.eu

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Materials

Name	Company	Catalog Number	Comments
Deionised water	Any available		18.2 MΩ cm
Concentrated hydrochloric acid (HCl).	Any available		Not less than 37 % m/v, c(HCl) = 12 mol/L, with a density of approx. ρ (HCl) 1.15 g/L
Concentrated nitric acid (HNO ₃)	Any available		Not less than 65 % m/v, c(HNO ₃) = 14 mol/L, with a density of approx. ρ 1.38 g/L
Chloroform	Any available		Harmful by inhalation and if swallowed. Irritating to skin. Wear suitable protective clothing and gloves.
Hydrogen bromide (HBr)	Any available		Not less than 48 % m/v
Hydrazine sulphate (N ₂ H ₆ SO ₄)	Any available		Harmful if swallowed. Causes burns. May cause cancer.
Magnesium nitrate hexahydrate [Mg(NO ₃) ₆ H ₂ O]	Any available		
Magnesium oxide (MgO)	Any available		
Potassium iodide (KI)	Any available		
Ascorbic acid (C ₆ H ₈ O ₆)	Any available		
Sodium hydroxide (NaOH)	Any available		
Sodium borohydride (NaBH ₄)	Any available		
Arsenic (V) standard solution	Any available		1,000 mg/L Use certified standard solutions commercially available
Centrifuge	Any available		
Mechanical shaker	Any available		
Sand bath	Any available		
Muffle furnace	Any available		
Polypropylene centrifuge (PC) tubes	Any available		50 mL with screw cap
Syringe filters with hydrophobic PTFE membrane	Any available		25 mm diameter
Pyrex glass beaker	Any available		Tall form 250 mL, capable of withstanding 500 °C
Watch glasses	Any available		
Volumetric flasks	Any available		10, 25, 100 or 200,

			Class A.
Plastic funnels	Any available		
Whatman n° 1 paper or equivalent	Any available		
Atomic absorption spectrometer equipped with a flow injection system (FI-AAS)	Any available		