

Materials List for:

Automated ⁹⁰Sr Separation and Preconcentration in a Lab-on-Valve System at Ppq Level

Victor Vicente Vilas¹, Sylvain Millet¹, Miguel Sandow¹, Laura Aldave de las Heras¹

¹Directorate G - Nuclear Safety & Security, Unit G.III. 8 - Waste Management, European Commission, DG Joint Research Centre - JRC

Correspondence to: Laura Aldave de las Heras at Laura.ALDAVE-DE-LAS-HERAS@ec.europa.eu

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Materials

Name	Company	Catalog Number	Comments
microLAB 600 series	Hamilton	ML600EE6910	Two dual syringe pump system, equipped with two 10 mL glass syringes. The instruments are interconnected using the CAN port (daisy chain).
FlowLogic U	LabLogic	SG-BXX-05	Liquid scintillator with high flash point
β-RAM 5	LabLogic		flow detector, 2000 µL coiled Teflon flow cell. Software Laura 4.2.8 (LabLogic, England) run on desktop PC and connected to the detector via USB
SC-µ DX Autosampler	Elemental Scientific Instruments (ESI)		
Cheminert selector	Valco Instruments Co. Inc.		in-house made Lab-on-Valve has been mounted on this selector
Modular Valve Positioner (MVP)	Hamilton		
mini magnetic stirrer	IKA		
Nitric Acid Suprapur 65%	Merck	1.00441.1000	purified using quartz sub-boiling distillation unit
Sr-resin	Eichchrom Technologies, Inc	SR-B100-A	particle size 100-150 µm
Water system Elix 3 in combination with Mili-Q Element A10	Millipore		high-purity water (18.2 MΩ cm)
Sr-90 standard	Eckert & Ziegler	7090	Sr-90 concentration 1.915 kBq/g ± 3.0%, reference date 15-May-2016 12:00 PST
MLS quartz sub-boiling distillation unit	MLS GmbH		Subboiling unit for the purification of HCl and nitric acid