

# Arsenic Speciation on Hamilton PRP-X100

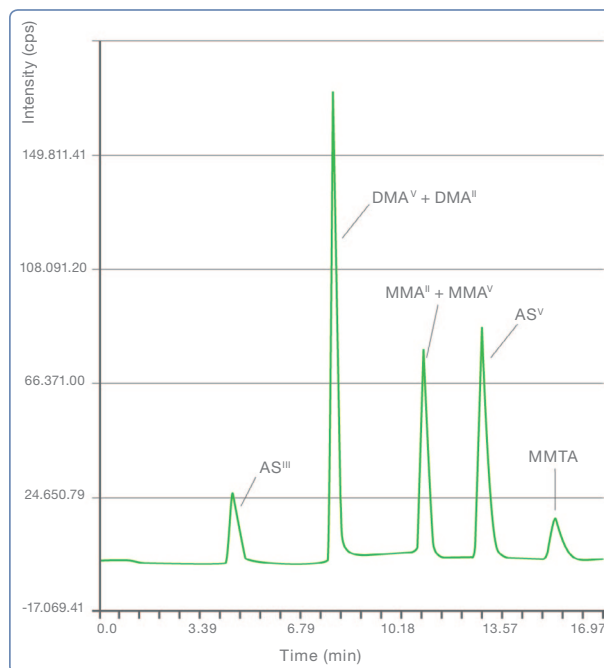
Organic arsenic compounds added to feed stocks of chicken and poultry pose serious environmental and ecological threats. National and worldwide health organizations, such as the United States Environmental Protective Agency and the US Food and Drug Administration, have recently implemented more stringent concentration limits for arsenic species in drinking water and foodstuffs.

Analysis of arsenic species is made challenging due to diverse sample matrices. To circumvent these problems, an HPLC-ICPMS method has been developed. Resolution of arsenic compounds is achieved by ion exchange chromatography on a Hamilton PRP-X100 column, a 55% cross-linked polystyrene-divinylbenzene copolymer functionalized with quaternary ammonium anion-exchanger group. Detection is accomplished by inductively coupled plasma-mass spectrometry.

Column:	Hamilton PRP-X100, 5 $\mu$ m, 4.6 x 250 mm
Part Number:	79181
Flow Rate:	1.0 mL/min
Mobile Phase:	2 mM (NH <sub>4</sub> ) <sub>2</sub> CO <sub>3</sub> for 0 – 3 min 40 mM (NH <sub>4</sub> ) <sub>2</sub> CO <sub>3</sub> for 3 – 14 min 2 mM (NH <sub>4</sub> ) <sub>2</sub> CO <sub>3</sub> for 13 – 17 min
Injection Volume:	50 $\mu$ L, 100 $\mu$ g/L of each standard
Detection:	ICP-MS

## Ordering Information

Part Number	Product Name	Particle Size	Dimensions	Material
79852	PRP-X100	5 $\mu$ m	2.1 x 150 mm	PEEK
79190	PRP-X100	5 $\mu$ m	2.1 x 250 mm	Stainless Steel
79810	PRP-X100	5 $\mu$ m	4.1 x 50 mm	Stainless Steel
79538	PRP-X100	5 $\mu$ m	4.1 x 100 mm	Stainless Steel
79812	PRP-X100	5 $\mu$ m	4.1 x 150 mm	Stainless Steel
79174	PRP-X100	5 $\mu$ m	4.6 x 150 mm	PEEK
79181	PRP-X100	5 $\mu$ m	4.6 x 250 mm	PEEK
79421	PRP-X100	10 $\mu$ m	2.1 x 150 mm	Stainless Steel
79346	PRP-X100	10 $\mu$ m	2.1 x 250 mm	Stainless Steel
79365	PRP-X100	10 $\mu$ m	4.1 x 50 mm	Stainless Steel
79439	PRP-X100	10 $\mu$ m	4.1 x 100 mm	Stainless Steel
79434	PRP-X100	10 $\mu$ m	4.1 x 150 mm	Stainless Steel
79433	PRP-X100	10 $\mu$ m	4.1 x 250 mm	Stainless Steel
79354	PRP-X100	10 $\mu$ m	4.6 x 150 mm	PEEK
79455	PRP-X100	10 $\mu$ m	4.6 x 250 mm	PEEK
79353	PRP-X100	12–20 $\mu$ m	21.2 x 250 mm	Stainless Steel



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