

Classification	ID	Revision	Effective Date
C-TOX-A	72894	2	10/13/2021 7:51:26 AM

### **Ratite (Ostrich, Rhea, Emu) Metal & Mineral Data (where known)**

Minerals measured by ICP/MS. This mineral data is based on Puls, [Mineral Levels in Animal Health](#), 1994. We are in the process of gathering population data for multiple species to adjust the adequate ranges.

#### **Blood and Serum/Plasma**

Analyte	Sample	Ratite Normal Range	Units	Deficient	High	Toxic
Cobalt	Serum	-	ng/mL	-	-	-
Copper	Serum	0.20 – 0.39	µg/mL	-	-	-
Iron	Serum	-	ug/dl	-	-	-
Manganese	Blood	-	ng/mL	-	-	-
Molybdenum	Serum	-	ng/mL	-	-	-
Selenium	Serum	180 - 370	ng/mL	-	-	-
Zinc	Serum	0.68 – 2.96	µg/mL	-	-	-
Arsenic	Blood	-	µg/mL	-	-	-
Cadmium	Blood	< 0.01	µg/mL	-	-	-
Lead	Blood	0.04 – 0.08	µg/mL	-	-	-
Thallium	Blood	-	ng/mL	-	-	-