



# CTX Quick Check App



## Heavy Metals in Cosmetics

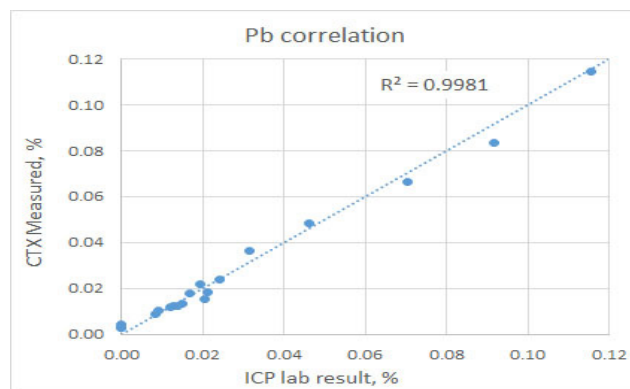
Heavy metals such as lead (Pb), arsenic (As) and mercury (Hg) have been used in women's cosmetics throughout history. The goal was often to provide a pale complexion, one that made women appear more fragile or delicate, and indicate a higher socio-economic status.

It is now known that heavy metals in cosmetics are in fact quite dangerous. Consequently, regulations are placed on their content levels in cosmetic and nutraceutical products. The US, China and Japan have strict limits on Pb, As and Hg; while the EU has restrictions on even more.

### Fast Screening for Heavy Metals in Cosmetics

Portable XRF can quickly and accurately determine if a product contains dangerous levels of heavy metals in cosmetics using the Restricted Materials Calibration.

Portable handheld or countertop XRFs can be used wherever and whenever needed - during manufacture, when receiving starting materials, in stockrooms, on counters in retail or wholesale stores, and even at border security check points.



The high performance and contrast daylight visible LCD 3.7 inch touchscreen display is for system control and view of easy-to-read, and understandable results. These can be viewed as spectra, concentration or as pass/fail with preset thresholds.

### Bruker's Portable CTX™



- Small, lightweight battery operated portable XRF analyzer
- 7.1 kg (15.6 lbs) with battery
- 13.5 cm x 25 cm x 35 cm WxDxH (5.3 in x 9.8 in x 13.8 in)
- Operating temperature: -10° C to +40° C (+14° F to 104° F)
- Splash / dust proof (IP-54) stainless steel housing for use in rugged conditions
- Sample chamber: 12 cm x 13.5 cm x 8.5 cm WxDxH (4.7 in x 5.3 in x 3.3 in)



### Bruker's Portable CTX Quick Check PLUS

Do you need to do a Quick Check of other elements too? The CTX can be customized to meet your specific needs.

- Ready-to-go factory standard or custom calibrations
- Optional EasyCal Software to create your own calibrations
- Measure powders, liquids, solids or pastes
- Capable of measuring elements from Mg to U in ambient air
- Print results with optional Bluetooth™ portable printer

**Bruker Portable XRF Elemental Analyzers:** *Simultaneously measure elements from sodium (Na) to uranium (U) at concentrations as low as parts-per-million to high percentage levels (depending on the element). Objects of any form – liquid, solid, cores, powder, shavings, chips – can be analyzed wherever they are located.*

Bruker's portable XRF analyzers are primarily used for quantitative analysis utilizing installed calibrations with like-sample standard reference materials. Results can be given as composition or Pass/Fail/Inconclusive for single or multi-elemental analysis of elements from Na to U, depending on the model. Spectra is always being collected with each measurement enabling live viewing or subsequent retrieval of stored data. Researchers primarily use this data to identify the presence of elements or to track estimates and/or ratios of elements of interest for qualitative or semi-quantitative work.

The convenient form factor of Bruker's CTX is ideal for samples presented in containers such as powders, soils and liquids; small samples; and those which require extended measurements of more than a few seconds.

Handheld XRFs enable in-situ measurements; in other words, they are "point-and-shoot" analyzers. An optional desk or bench top stand with a PC is typically used for samples presented in containers such as powders, soils and liquids; small samples; and those which require extended measurements of more than a few seconds.

**Bruker's portable XRF features:**

- Rh X-ray tube with high performance SDD detector
- 5 filter wheel (plus manual slot for TRACER 5)
- SharpBeam geometry for high performance, speed and sensitivity
- Touchscreen operation
- Internal camera (optional for CTX and TITAN)
- Wireless communication
- Battery or AC operation
- Lightweight and supplied with water tight transport case; Optional backpack for CTX
- Optional PC software available for qualitative analysis (Artax) or user generated calibrations (EasyCal)
- Optional factory installed calibrations available for various models including applications for:
 

• Precious Metals	• Food Quality
• Alloys	• Plant Materials
• Metals in Oil	• Maritime Sulfur
• Coatings	• Industrial Lead in Paint
• Hg Contamination	• Filter & Dust Wipes
• Mudrock, GeoExploration	• Glass
• Limestone	• Ancient Copper Alloys
• Heavy Metals & Nutrients in Soil	• Custom factory calibrations are also available
• Restricted Materials (RoHS)	



**CTX™ Portable XRF analyzer**  
Mg (12) to U (92)



**TRACER 5 Handheld XRF analyzer**  
Na (11) to U (92)



**S1 TITAN Handheld XRF analyzer**  
Mg (12) to U (92)

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