

CTX Quick Check App



Phos in Edible Oils

Phosphorus (P) monitoring in the production of edible oils is critical. It is indicative of phosphatide content which determines oil quality and helps monitor the refining process, especially important during the degumming process. A quick and straightforward method is needed for high quantities of samples.

X-ray Fluorescence (XRF) analysis is a simple, quick, and non-destructive method to measure the elemental content of oils. Portable XRFs enable analysis of phosphorus anywhere in the refining process - from crude to refined, bleached, and deodorized (RBD) oil.

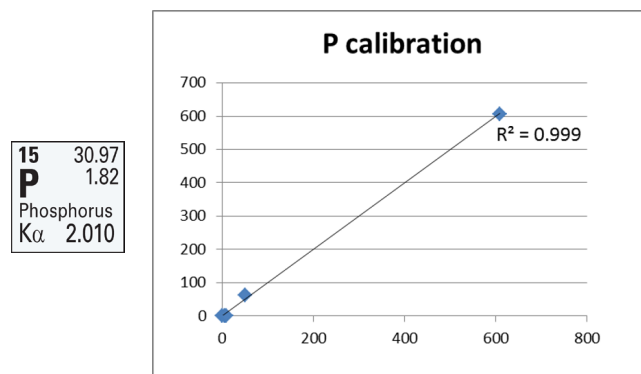
Bruker's Portable CTX™



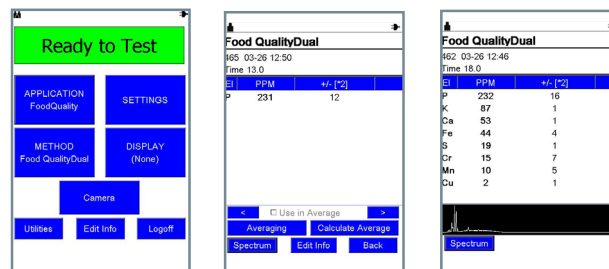
- Small, lightweight battery operated portable XRF analyzer
- 7.1 kg (15.6 lbs) with battery
- 13.5 cm x 25 cm x 35 cm WxDxH (5.3 in x 9.8 in x 13.8 in)
- Operating temperature: -10° C to +40° C (+14° F to 104° F)
- Splash / dust proof (IP-54) stainless steel housing for use in rugged conditions
- Sample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

Portable XRF for Fast QA/QC of Phosphorus in Edible Oils

Elemental concentrations in unknown samples are determined by comparing their peak signals to those of reference materials with known concentrations. The correlation of known concentrations to peak signals is a calibration; and, its R^2 value indicates its accuracy, the closer to 1.0, the better. A variety of calibrations can be installed on Bruker's portable XRF analyzers.



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 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:

<ul style="list-style-type: none"> • Precious Metals • Alloys • Metals in Oil • Coatings • Hg Contamination • Mudrock, GeoExploration • Limestone • Heavy Metals & Nutrients in Soil • Restricted Materials (RoHS) 	<ul style="list-style-type: none"> • Food Quality • Plant Materials • Maritime Sulfur • Industrial Lead in Paint • Filter & Dust Wipes • Glass • Ancient Copper Alloys • Custom factory calibrations are also available
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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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