

Order No.: RMM-04-3503r

for analysis of Ochratoxin A (OTA) in Green coffee

Ochratoxin A (OTA)

Specification

Lot No.	0043503230921275		
Matrix Type	Green coffee		
Analyte	Ochratoxin A (OTA)		
Weight/Volume	50 g		
Storage	-18 °C		
Retest	09/2026		

	Concentration x_{PT} [µg/kg]	data points n	satisfactory range $x_{PT}~\pm 2~\sigma_{PT}~[\mu { m g/kg}]$	uncertainty* $2 u(x_{PT})[\mu g/kg]$
Ochratoxin A	6,11	19	3,42 - 8,80	0,44

^{*}Expanded uncertainty with k=2 for approximately 95% level of confidence (PA/PH/OMCL(18)153R1 CORR Evaluation of Measurement Uncertainty - Annex 2.5).



Comments

aokin reference matrix material is naturally contaminated and homogenized. Concentration of the analyte is determinate in a proficiency round. Unweighted mean value of the means of accepted sets of data, each set being obtained in a different laboratory and/or with a different method of determination such as HPLC-MS/MS, HPLC/FLD, LC-MS/MS, ELISA, HPLC.

The certified value and its uncertainty are traceable to the International System of Units (SI) as chemical mass fraction as $\mu g/kg$. The assigned value, the satisfactory range and the expanded uncertainty are given. The minimum amount of sample to be used is 10 g.

Calculation of the assigned value x_{PT}

The Assigned Value is the value attributed to a particular property of interlaboratory proficiency test (definition from ISO13528:2016). x_{PT} is derived from participants quantitative results obtained with confirmatory analysis. The procedure for determining is from the Algorithm A (ISO 13528:2016) or from the median.

The standard uncertainty is expanded by a factor f = 1,25 and is calculated as: $u(x_{PT}) = f \frac{\sigma_{PT}}{\sqrt{n}}$ (uncertainty of the characterization) where:

- ullet σ_{PT} is the robust estimate of the participant standard deviation;
- $\sigma_{PT} = b \cdot x_{PT}$ where b is the relative robust estimate of the participant standard deviation
- n is the number of participants used in calculating the robust assigned values.

The satisfactory range is calculated from the expanded (k=2) standard deviation of the proficiency assessment: The satisfactory range equals $x_{PT} \pm 2 \sigma_{PT}$.