

AFLA
Order No.: RMM-03-1553-1r

for analysis of Aflatoxin total (AFLA) in Animal feed

Aflatoxin B1 (AFLA)

## Specification

Lot No.	003155301080615275
Matrix Type	Animal feed
Analyte	Aflatoxin total (AFLA)
Weight/Volume	50 g
Storage	-18 °C
Retest	06/2024

	Concentration $x_{PT}$ [µg/kg]	data points n	satisfactory range $x_{PT}~\pm 2~\sigma_{PT}~[\mu \mathrm{g/kg}]$	uncertainty* $2  u(x_{PT}) [\mu \mathrm{g/kg}]$
Aflatoxin B1	16,78	15	6,85 - 26,71	2,16
Aflatoxin B2	1,13	9	0,63 - 1,63	0,16
Aflatoxin G1	< 1,00	16	nd	nd
Aflatoxin G2	< 1,00	16	nd	nd
Aflatoxin total	19,11	11	8,02 - 30,20	2,9

<sup>\*</sup>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.

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:  $u(x_{PT}) = f^{\sigma_{PT}}/\sqrt{n}$  (uncertainty of the characterization)

## where:

- ullet  $\sigma_{PT}$  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  $x_{PT} \pm 2 \sigma_{PT}$ .