

Ochratoxin A Standard (solid)

Order-No: CH-04-S5

Lot: xxx xxx xxx xxx



Analyte: Ochratoxin A (OTA)

Specification:

Substance: Ochratoxin A, Benzene free

From Aspergillus ochraceus Source:

Empirical Formula: $C_{20}H_{18}CINO_6$

> Appearance: Off-white powder

Solubility: Clear yellow solution at 10 mg/ml Methanol

Melting point: 105-109°C

Molecular Weight: 403,8

> Detection: spray with H_2SO_4 and heat Approved:

> > TLC (NP, Toluene, ETOAC, ACOH 6:3:1) >99% TLC (RP C18, Methanol, H₂O 9:1) >99%

> > **HPLC** 98.19%

> > (Methanol) 333nm Lambda max

303-47-9 CAS-No.:

> Wight: 5,0 mg

Expiry date: 1 year after delivery

Storage conditions: -20 °C

> Certification: The calibrant is certified on the basis of gravimetric preparation.

> > Values are based on weight amount and purity.

Uncertainty < 0,0072 mg in accordance with ISO Guide 31, ISO

Guide 35 and Eurachem/CITAG Guides.

Subject to change without notice.



Calculation of uncertainty:

(After the concentration of the gravimetric prepared solution was confirmed by kinetic fluorescent polarization, the uncertainty of the calibrant solution was calculated on the basis of preparation) Calculation of the combined uncertainty $u_{\text{\tiny C}}$ and the expanded standard uncertainty U:

Uncertainty components	Description	Standard uncertaint (u)	у
Purity (P) of solid Ochratoxin A	P = 98.19% ± 0.6%	u(P) = 0.4%	а
Weighing procedure weighted sample: m _{ws} = 5,0 mg	repeatability: 0.03 mg linearity: 0.01 mg	u(m) = 0.03 mg	b

 $[^]a$ Maximum tolerance of purity (rectangular distribution) was divided by $\sqrt{3}$ b Estimation of this u-value is based upon the values for repeatability and

Calculation of the combined uncertainty u_c and the expanded standard uncertainty U:

$$\frac{u_{c}\left(c_{toxin}\right)}{c_{toxin}} = \sqrt{\left[\frac{u\left(P\right)}{P}\right]^{2} + \left[\frac{u\left(m\right)}{m_{ws}}\right]^{2}} = \sqrt{\left[\frac{0.4}{98.19}\right]^{2} + \left[\frac{0.03}{5,0}\right]^{2}} = 0.0072$$



H300 P264 P301 + P310

Danger

Contains: Ochratoxin A

Volume: 5 mg

Fatal if swallowed

Wash hands thoroughly after handling

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

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linearity described in the user manual of the microbalance