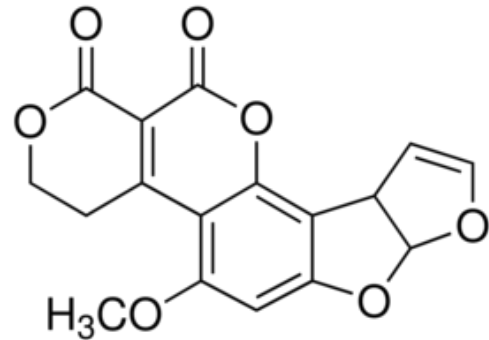


Aflatoxin G1 Standard (solid)

Order-No: CH-03G1-S5

Lot: xxx xxx xxx xxx



Analyte: Aflatoxin G1 (AFLA G1)

Specification:

Substance:	Aflatoxin G1	
Source:	<i>Aspergillus flavus</i>	
Empirical Formula:	C ₁₇ H ₁₂ O ₇	
Appearance:	Slightly yellow powder	
Solubility:	Clear colorless solution at 5mg/ml CH ₂ Cl ₂	
Melting point:	245°C	
Molecular Weight:	328,3	
Approved:	Detection: spray with H ₂ SO ₄ and heat	
	TLC (NP, CH ₂ Cl ₂ : Acetone 97:3)	>99%
	TLC (RP C18, Methanol : H ₂ O 9:1)	>99%
	HPLC	99,8%
CAS-No.:	1165-39-5	
Weight:	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 < 0,007 mg in accordance with ISO Guide 31, ISO Guide 35 and Eurachem/CITAG Guides.	

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_c and the expanded standard uncertainty U :

Uncertainty components	Description	Standard uncertainty (u)	
Purity (P) of solid Aflatoxin G1	P = 99.8%	$u(P) = 0.4\%$	a
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 linearity described in the user manual of the microbalance

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

$$\frac{u_c(c_{toxin})}{c_{toxin}} = \sqrt{\left[\frac{u(P)}{P}\right]^2 + \left[\frac{u(m)}{m_{ws}}\right]^2} = \sqrt{\left[\frac{0.4}{99.8}\right]^2 + \left[\frac{0.03}{5.0}\right]^2} = 0.007$$



Danger

Danger

Contains: Aflatoxin G1

Volume: 5 mg

H300
H310
H330
H350

P201
P260
P264
P280
P284

P301 + P310

Fatal if swallowed
Fatal in contact with skin
Fatal if inhaled
May cause cancer

Obtain special instructions before use
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray
Wash hands thoroughly after handling
Wear protective gloves/ protective clothing
Wear respiratory protection

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

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