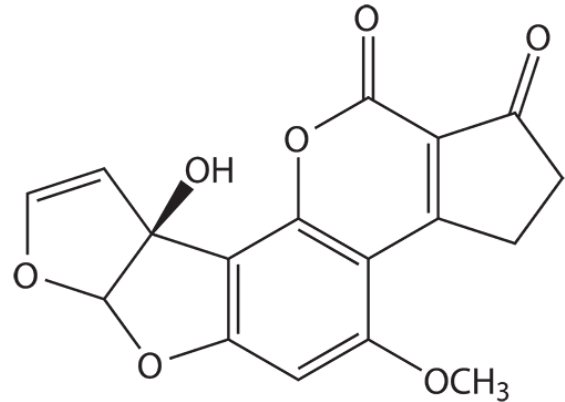


Aflatoxin M1 Standard (solid)

Order-No: CH-31-S5

Lot: xxx xxx xxx xxx



Analyte: Aflatoxin M1 (AFLA M1)

Specification:

Substance:	Aflatoxin M1	
Source:	<i>Aspergillus flavus</i>	
Empirical Formula:	C ₁₇ H ₁₂ O ₇	
Appearance:	Slightly yellow powder	
Solubility:	Clear colorless solution at 1 mg/ml Methanol	
Melting point:	299°C	
Molecular Weight:	328,3	
Approved:	Detection: spray with H ₂ SO ₄ and heat	
	TLC (NP, CH ₂ Cl ₂ , Acetone 7:3)	>99%
	TLC (RP C18, Methanol : H ₂ O 9:1)	>99%
	TLC (RP C18, H ₂ O, CH ₃ CN, Methanol 60:20:20)	>99%
	HPLC	>99,9%
CAS-No.:	6795-23-9	
Weight:	5 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 in accordance with ISO Guide 31, ISO Guide 35 and Eurachem/CITAG Guides.	

<p>Calculation of uncertainty:</p> <p>(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:</p>	<table border="1"> <thead> <tr> <th>Uncertainty components</th> <th>Description</th> <th>Standard uncertainty (u)</th> <th></th> </tr> </thead> <tbody> <tr> <td>Purity (P) of solid Aflatoxin M1</td> <td>P = 99.9%</td> <td>$u(P) = 0.4\%$</td> <td>a</td> </tr> <tr> <td>Weighing procedure weighted sample: $m_{ws} = 5.00$ mg</td> <td>repeatability: 0.03 mg linearity: 0.01 mg</td> <td>$u(m) = 0.03$ mg</td> <td>b</td> </tr> </tbody> </table>	Uncertainty components	Description	Standard uncertainty (u)		Purity (P) of solid Aflatoxin M1	P = 99.9%	$u(P) = 0.4\%$	a	Weighing procedure weighted sample: $m_{ws} = 5.00$ mg	repeatability: 0.03 mg linearity: 0.01 mg	$u(m) = 0.03$ mg	b
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<p>Calculation of the combined uncertainty u_c and the expanded standard uncertainty U:</p> $\frac{u_c(c_{toxin})}{c_{toxin}} = \sqrt{\left[\frac{u(P)}{P}\right]^2 + \left[\frac{u(m)}{m_{ws}}\right]^2} = \sqrt{\left[\frac{0.4}{99.9}\right]^2 + \left[\frac{0.03}{5.00}\right]^2} = 0.0072$	<p>^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</p>												

<p>Danger</p>	<p>H300 H310 H330 H350</p>	<p>Danger</p> <p>Contains: Aflatoxin M1</p> <p>Volume: 5 mg</p>
	<p>P201 P260 P264 P280 P284</p> <p>P301 + P310</p>	<p>Fatal if swallowed Fatal in contact with skin Fatal if inhaled May cause cancer</p> <p>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</p> <p>IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician</p> <p>Aokin AG – 13125 Berlin Tel: +49 (0) 3094892160</p>