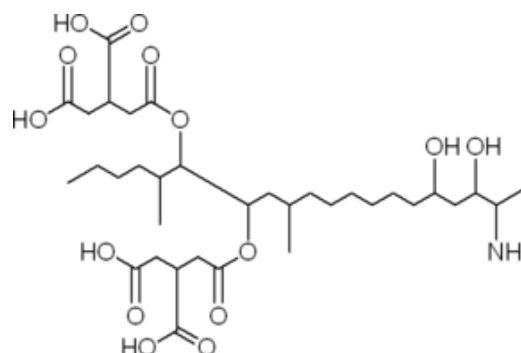




Fumonisin B2 Standard (solid)

Order-No: CH-052-S5

Lot: xxx xxx xxx xxx



Analyte: Fumonisin B2 (FUM)

Specification:

Substance: Fumonisin B2
 Source: *Fusarium moniliforme*
 Empirical Formula: C₃₄H₅₉O₁₄
 Appearance: Off-white powder
 Solubility: Clear colorless solution at 5 mg/ml
 Molecular Weight: 705.8
 Approved: TLC, detection: spray with p-Anisaldehyde (0.5 gr in: methanol: HOAc: H₂SO₄ 85:10:5 sol.) and heat;
 TLC (NP, CH₂Cl₂ : Methanol, HOAc, H₂O 60:40:1:9) 98%
 TLC (RP C18, CH₃CN, H₂O 9:1) 98%
 TLC (RP C18, gradient 0.1% HCOOH → Methanol, ELSD) 100%
 CAS-No.: 116355-84-1
 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 < 0,072 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 Fumonisin	P = 98.0%	$u(P) = 0.4\%$	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 :

$$\frac{u_c(c_{toxin})}{c_{toxin}} = \sqrt{\left[\frac{u(P)}{P}\right]^2 + \left[\frac{u(m)}{m_{ws}}\right]^2} = \sqrt{\left[\frac{0.4}{98}\right]^2 + \left[\frac{0.03}{5,0}\right]^2} = 0.0072$$

Danger

Contains: Fumonisin B2

Volume: 5 mg



Danger

H300 Fatal if swallowed

P264 Wash hands thoroughly after handling

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

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