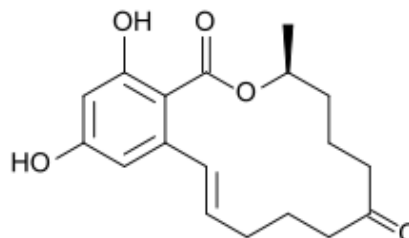


Zearalenone Standard (solid)

Order-No: CH-01-S1

Lot: xxx xxx xxx xxx




Analyte: Zearalenone (ZON)

Specification:

Substance: Zearalenone
 Source: *Giberella zeae*
 Empirical Formula: C₁₈H₂₂O₅
 Appearance: Off-white powder
 Solubility: 5mg/ ml Methanol, clear colorless solution, may be soluble in other solvents
 Melting point: 166°C
 Molecular Weight: 318,36
 Approved: TLC, detection: spray with H₂SO₄ and heat;
 TLC (NP, DCM, Acetonel 95:5) 99%
 TLC (RP C18, Methanol, H₂O 9:1) >99%
 HPLC;
 HPLC (RP C18, 250x4.6, Gradient, 316nm) >99.24%
 CAS-No.: 17924-92-4
 Weight: 1,0 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 < 0,03 mg 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 Zearalenone</td> <td>$P = 99.24\% \pm 0.6\%$</td> <td>$u(P) = 0.4\%$</td> <td>a</td> </tr> <tr> <td>Weighing procedure weighted sample: $m_{ws} = 1.0$ 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 Zearalenone	$P = 99.24\% \pm 0.6\%$	$u(P) = 0.4\%$	a	Weighing procedure weighted sample: $m_{ws} = 1.0$ 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> $\frac{u_c(c_{toxin})}{c_{toxin}} = \sqrt{\left[\frac{u(P)}{P}\right]^2 + \left[\frac{u(m)}{m_{ws}}\right]^2} = \sqrt{\left[\frac{0.4}{99.24}\right]^2 + \left[\frac{0.03}{1.0}\right]^2} = 0.0302$	<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</p> <p>P264</p> <p>P301 + P310</p>	<p>Danger</p> <p>Contains: Zearalenone</p> <p>Volume: 1 mg</p> <p>Fatal if swallowed</p> <p>Wash ... thoroughly after handling</p> <p>IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. lenses, if present and easy to do. Continue rinsing.</p> <p>Aokin AG – 13125 Berlin Tel: +49 (0) 3094892160</p>
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