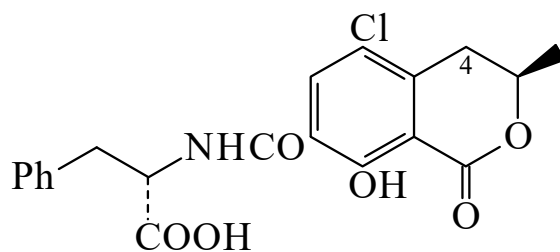




>>Entry Name: Ochratoxin A

ENTRY UNDER REVIEW

Synonym(s): *N*-[(5-Chloro-3,4-dihydro-8-hydroxy-3-methyl-1-oxo-1*H*-2-benzopyran-7-yl)carbonyl]phenylalanine, 9Cl



CAS Registry Number: 303-47-9

Molecular Formula: C₂₀H₁₈ClNO₆

Molecular Weight: 403.818

Accurate Mass: 403.082266

Percentage Composition: C 59.49%; H 4.49%; Cl 8.78%; N 3.47%; O 23.77%

Biological Source: Prod. by *Aspergillus melleus*, *Aspergillus sulphureus* and *Penicillium viridicatum*

Use/Importance: Mycotoxin. Potential contaminant of foodstuffs, especially cereals

Physical Description: Cryst. (xylene)

Melting Point: Mp 169°

Optical Rotation: $[\alpha]_D^{20} -118$ (c, 1.1 in CHCl₃)

Solubility: BERDY SOL: Sol. MeOH, CHCl₃; poorly sol. H₂O

UV: [neutral] $\lambda_{\max}$ 213 (ε 37600); 332 (ε 6500) (MeOH) (Derep) [neutral] $\lambda_{\max}$ 213 (ε 36800); 332 (ε 6400) (MeOH) (Berdy) [neutral] $\lambda_{\max}$ 215 (ε 34000); 333 (ε 2400) (EtOH) (Berdy)

Hazard & Toxicity: Possible human carcinogen. Exp. carcinogen and neoplastic agent. Nephrotoxic. Exp. reprod. and teratogenic effects. LD₅₀ (rat, orl) 20 mg/kg, LD₅₀ (pig, orl) 1 mg/kg. V. toxic if swallowed. Implicated in Balkan endemic nephropathy ; BERDY HAZD : LD₅₀ (rats, orl) 22 mg/kg

Aldrich: 85628-2

Sigma: O1877

Supelco: R42-6010

>>Derivative: Et ester

Synonym(s): Ochratoxin C

CAS Registry Number: 4865-85-4

Molecular Formula: C₂₂H₂₂ClNO₆

Molecular Weight: 431.872

Accurate Mass: 431.113566

Percentage Composition: C 61.19%; H 5.13%; Cl 8.21%; N 3.24%; O 22.23%

Biological Source: Metab. of *Aspergillus ochraceus*

Physical Description: Amorph.

Optical Rotation: $[\alpha]_D -100$ (c, 1.2 in EtOH)

>>Derivative: Dechloro

Synonym(s): Ochratoxin B

CAS Registry Number: 4825-86-9

Molecular Formula: C₂₀H₁₉NO₆

Molecular Weight: 369.373

Accurate Mass: 369.121239

Percentage Composition: C 65.03%; H 5.18%; N 3.79%; O 25.99%

Biological Source: Metab. of *Aspergillus ochraceus*

Physical Description: Cryst. (MeOH)

Melting Point: Mp 221°

Optical Rotation: $[\alpha]_D -35$ (c, 0.15 in EtOH)

UV: [neutral] $\lambda_{\max}$ 218 (ε 33600); 318 (ε 6500) (MeOH) (Derep) [neutral] $\lambda_{\max}$ 218 (ε 37200); 318 (ε 6900) (EtOH) (Berdy)

Hazard & Toxicity: Highly toxic orally

Sigma: O1382

Supelco: R47-4465

>>Derivative: 4*S*-Hydroxy

Synonym(s): 4-Hydroxyochratoxin A