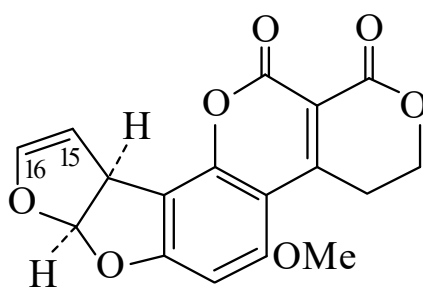




>>Entry Name: Aflatoxin G₁

Synonym(s): Aflatoxin G



Absolute
conf guration

CAS Registry Number: 1165-39-5

Molecular Formula: C₁₇H₁₂O₇

Molecular Weight: 328.278

Accurate Mass: 328.058305

Percentage Composition: C 62.20%; H 3.68%; O 34.12%

Biological Source: Isol. from *Aspergillus flavus* and *Aspergillus parasiticus*

Use/Importance: Mycotoxin

Physical Description: Needles (MeOH) exhibiting green fluor.

Melting Point: Mp 257-259° (247-250°)

Optical Rotation: $[\alpha]_D^{23}$ -556 (c, 0.1 in CHCl₃)

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

UV: [neutral] $\lambda_{\max}$ 235 (ε 21200); 262 (ε 26300); 358 (ε 14000) (MeOH) (Berdy) [neutral] $\lambda_{\max}$ 243 (ε 11500); 257 (ε 9900); 264 (ε 10000); 362 (ε 16100) (EtOH) (Berdy)

Hazard & Toxicity: Human and exp. carcinogen. LD₅₀ (dck, orl) 0.79 mg/kg

Aldrich: 85622-3

Sigma: A0138

Supelco: R42-6070

>>Derivative: 15,16-Dihydro

Synonym(s): Aflatoxin G₂

CAS Registry Number: 7241-98-7

Molecular Formula: C₁₇H₁₄O₇

Molecular Weight: 330.293

Accurate Mass: 330.073955

Percentage Composition: C 61.82%; H 4.27%; O 33.91%

Biological Source: Minor constit. of *Aspergillus flavus*

Use/Importance: Mycotoxin

Physical Description: Cryst. with green fluor. (EtOH)

Melting Point: Mp 237-240°

Optical Rotation: $[\alpha]_D^{23}$ -473 (c, 0.084 in CHCl₃)

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

UV: [neutral] $\lambda_{\max}$ 223 (); 265 (ε 11200); 363 (ε 19300) (EtOH) (Berdy)

Hazard & Toxicity: LD₅₀ (dck, orl) 2.45 mg/kg

Aldrich: 85623-1

Sigma: A0263

Supelco: R42-6060

>>Derivative: 15,16-Dihydro, 16-hydroxy

Synonym(s): Aflatoxin G_{2a}

CAS Registry Number: 20421-10-7

Molecular Formula: C₁₇H₁₄O₈

Molecular Weight: 346.293

Accurate Mass: 346.06887

Percentage Composition: C 58.96%; H 4.07%; O 36.96%

Biological Source: Metab. of *Aspergillus flavus*

Physical Description: Cryst. with green fluor.

Melting Point: Mp 190 dec.°

Sigma: A9151