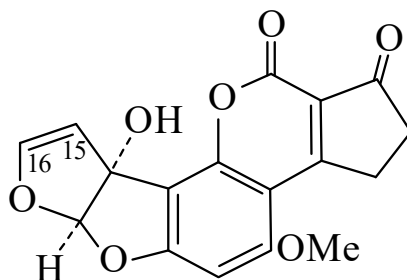




>>Entry Name: Aflatoxin M₁



CAS Registry Number: 6795-23-9

Molecular Formula: C₁₇H₁₂O₇

Molecular Weight: 328.278

Accurate Mass: 328.058305

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

Biological Source: Minor metab. of *Aspergillus flavus*, also found in the milk of cows and sheep fed toxic meal. Metab. of Aflatoxin B₁ [JHZ87-P](#)

Use/Importance: Mycotoxin

Physical Description: Cryst. (MeOH) exhibiting blue-violet fluor.

Melting Point: Mp 299 dec.°

Optical Rotation: $[\alpha]_{\text{D}}^{20} -280$ (c, 0.1 in DMF)

UV: [neutral] λ_{max} 235 (ϵ 21200); 262 (ϵ 16300); 358 (ϵ 14000) (MeOH) (Berdy) [neutral] λ_{max} 226 (); 265 (); 357 () (EtOH) (Berdy)

Hazard & Toxicity: Exp. carcinogen. Hepatotoxic. Less potent carcinogen than Aflatoxin B₁

Sigma: A9276

Supelco: R42-6080

>>Derivative: Ac

Physical Description: Oil

>>Derivative: 15,16-Dihydro

Synonym(s): Aflatoxin M₂

CAS Registry Number: 6885-57-0

Molecular Formula: C₁₇H₁₄O₇

Molecular Weight: 330.293

Accurate Mass: 330.073955

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

Biological Source: Trace metab. of *Aspergillus flavus*

Use/Importance: Mycotoxin

Physical Description: Cryst. with violet fluor. (MeOH/CHCl₃)

Melting Point: Mp 293 dec.°

Sigma: A9401

Supelco: R47-4455

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

Synonym(s): Aflatoxin M_{2a}

CAS Registry Number: 36601-31-7

Molecular Formula: C₁₇H₁₄O₈

Molecular Weight: 346.293

Accurate Mass: 346.06887

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

Source/Synthesis: Hemiacetal formed from Aflatoxin M₂ by acid-cat. addn. of H₂O

References: