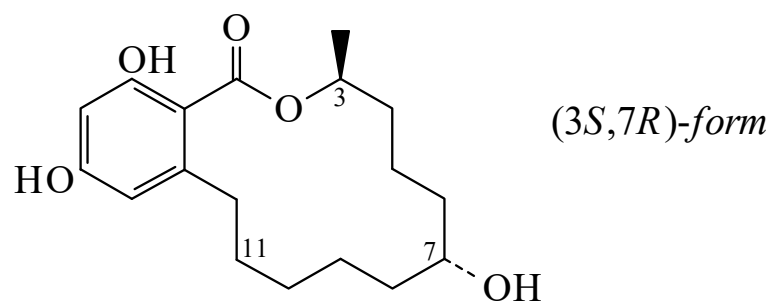




>>Entry Name: Zearalanol

Synonym(s): 3,4,5,6,7,8,9,10,11,12-Decahydro-7,14,16-trihydroxy-3-methyl-1*H*-2-benzoxacyclotetradecin-1-one, 9Cl



Molecular Formula: C₁₈H₂₆O₅

Molecular Weight: 322.4

Accurate Mass: 322.178025

Percentage Composition: C 67.06%; H 8.13%; O 24.81%

Calculated Log P Data: Log P 4.37 (calc)

>>Variant: (3*S*,7*R*)-form

Synonym(s): α -Zearalanol. **Zeranol**, BAN, INN, USAN. Frideron. Ralabol. Ralgro. Ralone. Zerano. MK 188. P 1496

CAS Registry Number: 26538-44-3

Molecular Formula: C₁₈H₂₆O₅

Molecular Weight: 322.4

Accurate Mass: 322.178025

Percentage Composition: C 67.06%; H 8.13%; O 24.81%

Biological Source: Isol. from *Fusarium* spp. Obt. by redn. of Zearalenone

Use/Importance: Anabolic agent, estrogenic agent (mainly vet. use). Used as a growth promoter for food animals. Banned by the EU in 1989, but still permitted in the USA and some other countries. May also arise in livestock by ingestion of *Fusarium* contaminated pasture or feeds

Physical Description: Cryst. (2-propanol aq.)

Melting Point: Mp 182-184°

Optical Rotation: [α]_D +46.3 (c, 1 in MeOH)

Hazard & Toxicity: Exp. reprod. and teratogenic effects. Hepatotoxic. Causes hepatic neoplasms in rodents

Sigma: Z0292

>>Derivative: 11,12*E*-Didehydro

Synonym(s): α -Zearalenol

CAS Registry Number: 36455-72-8

Molecular Formula: C₁₈H₂₄O₅

Molecular Weight: 320.385

Accurate Mass: 320.162375

Percentage Composition: C 67.48%; H 7.55%; O 24.97%

Biological Source: Metab. of *Fusarium* spp.

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

Sigma: Z0166

Supelco: R47-4665

>>Derivative: 7-Deoxy

Synonym(s): Zearalane

CAS Registry Number: 7344-47-0

Molecular Formula: C₁₈H₂₆O₄

Molecular Weight: 306.401

Accurate Mass: 306.18311

Percentage Composition: C 70.56%; H 8.55%; O 20.89%

Source/Synthesis: Semisynthetic

Melting Point: Mp 154-156°