

Product Specification Sheet

Product Name: Zearalenone (Toxin F2)

Catalog Number: C9327

Technical information:

Chemical Formula: $C_{18}H_{22}O_5$

CAS #: 17924-93-4

Molecular Weight: 318.36

Purity: > 98%

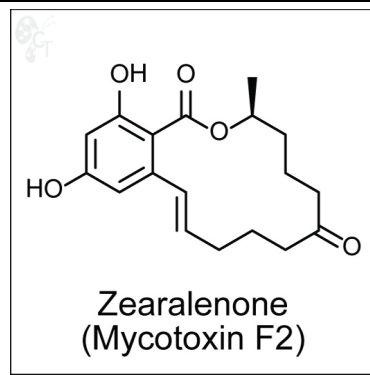
Appearance: Off-white solid

Solubility: Soluble in DMSO up to 50 mM

Chemical Name: (3S,11E)-3,4,5,6,9,10-hexahydro-14,16-dihydroxy-3-methyl-1H-2-benzoxacyclotetradecin-1,7(8H)-dione

Storage: For longer shelf life, store solid powder or DMSO solution at -20°C desiccated.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.



Handling: • To make 10 mM stock solution, add 0.314mL of DMSO for each mg of Zearalenone (Toxin F2).

- For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity: Zearalenone is a heat-resistant mycotoxin produced by fungi in food and animal feeds [1]. It acts as an estrogen receptor agonist and can cause hormonal effects in animal species such as the pig [2]. Evidence for Zearalenone effects have been observed in a wide variety of animals. The association between Zearalenone exposure and human diseases remains speculative at present; it has been considered as a possible causative agent in outbreaks of precocious pubertal changes in young children and has been suggested to have a possible involvement in human cervical cancer. [3,4]

- Reference:**
1. Zinedine A, et al. Review on the toxicity, occurrence, metabolism, detoxification, regulations and intake of zearalenone: An oestrogenic mycotoxin. Food Chem Toxicol, 2007; 45:1-18 Pubmed ID: 17045381
 2. Tiemann U. and Dänicke S. In vivo and in vitro effects of the mycotoxins zearalenone and deoxynivalenol on different non-reproductive and reproductive organs in female pigs: A review. Food Addit Contam, 2007; 24:306-314 Pubmed ID: 17364934
 3. Caloni F. and Cortinovis C. Effects of fusariotoxins in the equine species. Vet J, 2010; 186:157-161 Pubmed ID: 19837621
 4. Massart F. and Saggese G. Oestrogenic mycotoxin exposures and precocious pubertal development. Int J Androl, 2010; 33:369-376 Pubmed ID: 20002219

To reorder: <http://www.cellagentech.com/Zearalenone-Toxin-F2/>

For Technical Support: technical@cellagentech.com

Chemicals are sold for research use only, not for clinical or diagnostic use.