

Drug Status Report

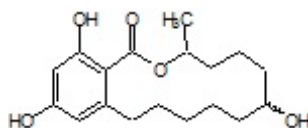
Drug: Zeranol

Drug Name Status: Zeranol is INN, USAN.

Chemical Name: (3,4,5,6,7,8,9,10,11,12-decahydro-7,14,16-trihydroxy-3-methyl-1H-2-benzoxacyclotetradecin-1-one)

Other Names: Zearalanol; alpha-zearalanol; beta-zearalanol

Chemical structure:



Molecular Formula: C₁₈H₂₆O₅

Pharmacological class / Application: non-steroidal estrogen; xenobiotic growth promoter

International status:

US: The drug is not currently listed specifically on the US Controlled Substances Act and is not mentioned on the DEA website. However, the DEA would need to provide the status of the substance under the CSA due to the definition of "anabolic steroid" in the CSA which means, "any drug or hormonal substance, chemically and pharmacologically related to testosterone (other than estrogens, progestins, and corticosteroids) that promotes muscle growth, and includes."

United Nations: The drug is not listed on the Yellow List - List of Narcotic Drugs under International Control. The drug is not listed on the Green List - List of Psychotropic Substances under International Control

Canadian Status: Zeranol is listed specifically on the CDSA as item 24 of Schedule IV. The chemical name used to describe the drug is not stereospecific. Zeranol is described by the INN as only the 7R configuration. As shown in the chemical structure above by the wiggly line, the hydroxyl group can have two orientations resulting in S and R absolute configurations at the 7 position. Due to this lack of specificity both isomers of zeranol must be considered to be included in item 24.

Recommendation: Both 7-isomers of zeranol are included in item 24 of Schedule IV to the CDSA and both are controlled substances.

July 5, 2005

Revised July 27, 2009