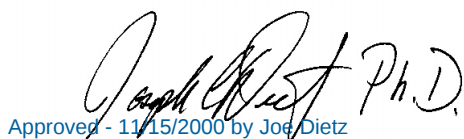


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Certificate of Analysis

Product Description: beta-Estradiol-3-benzoate**Catalog Number:** 190411**Lot:** 2213E**Formula:** C₂₅H₂₈O₃**CAS #:** 50-50-0**Physical Description:** White Powder**Formula Weight:** 376.5**Storage:** Room Temperature

Test	Specification	Result
Identity Test	Passes	Passes
Melting Point	190-200°C	190-200°C
FTIR	Conforms to Standard	Conforms to Standard
Optical Rotation (c=1, CHCl ₃)	+60 ± 3°	+60.0°

Additional Testing For Information Only:**Purity:** 99.61% (anhydrous basis, GC)

Approved - 11/15/2000 by Joe Dietz

MP Biomedicals, LLC.

Technical Director

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<mailto:biotech@mpbio.com><http://www.mpbio.com>

Online Ordering, MSDSs, certificates of analysis and data sheets now available on our web site

Technical Service: 1-800-279-5490 (440-337-1200) Customer Service: 1-800-854-0530 (440-337-1200)