



Version	00
Molecular weight	270.36
Quality Test / Release Date	06/22/2021
Molecular Formula	C18 H22 O2
CAS No	53-16-7
Linear Formula	
Flash Point (°C)	

## Certificate of Analysis

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Acros Organics expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to human or animals. It is the responsibility of the purchaser, formulator or those performing further manufacturing to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

<b>Catalog Number</b>	11784	<b>Quality Test / Release Date</b>	06/22/2021
<b>Lot Number</b>	A0431326	<b>Suggested retest date</b>	06/22/2026
<b>Description</b>	Estrone,99+%		
<b>Country of Origin</b>	CHINA		
<b>Declaration of Origin</b>	synthetic		

<b>BSE/TSE</b>	
<b>Chemical</b>	

Result name	Specifications	Test Value
Appearance (Color)	White to almost white	White
Appearance (Form)	Powder or crystals	Powder
Infrared spectrum	Conforms	Conforms
Melting point	258°C to 261°C	259.1°C
HPLC	>=99.0 % (on dried substance)	99.81 % (on dried substance)
Loss on drying	=<0.5 % (105°C, 3 hrs)	0.09 % (105°C, 3 hrs)
Sulfated ash	=<0.5 %	0.09 %
Specific optical rotation	+158° to +165° (20°C, 589 nm) (c=1, dioxane)	+161.3° (20°C, 589 nm) (c=1, dioxane)
Clarity of solution	passes test	passes test
Additional info	limit of equilenin and equilin: passes test	limit of equilenin and equilin: passes test



A handwritten signature in black ink, appearing to read "C. Wygaerts".

C. Wygaerts, QA Manager

Issued: 06-23-2021

Acros Organics  
 ENA23, zone1, nr 1350, Janssen Pharmaceuticaaan 3a, B-2440 Geel, Belgium  
 Tel +32 14/57.52.11 - Fax+32 14/59.34.34 Internet:<http://www.acros.com>  
 1 Reagent Lane, Fair Lawn, NJ 07410, USA Fax 201-796-1329