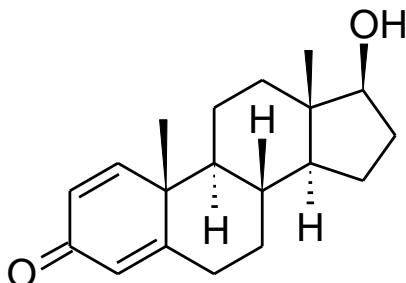


Compound Data Sheet

Structure:



Name	1-Dehydrotestosterone
Synonym(s)	17 β -Hydroxyandrost-1,4-dien-3-one; Androsta-1,4-diene-17 β -ol-3-one; 17 β -Boldenone
Epichem Code #	EPL-DV5 Batch 1
CAS #	846-48-0
Molecular Formula	C ₁₉ H ₂₆ O ₂
Molecular Weight	286.42 g/mol
Purity	99.5% at 242nm by HPLC (assuming all components detected with the same response factor). No impurities detected by ¹ H NMR analysis. LC/MS: [M+H] ⁺ = 287.2 IR ν_{max} cm ⁻¹ 3472(s), 1657(s)
Appearance	White solid
Melting point	169.9-172.1°C
Date of Manufacture	3 April 2019
Storage Requirements	Avoid exposure to heat, light and moisture.
Special Precautions	This compound is for laboratory use only. Its toxicological properties may not have been fully established. It should be handled only by suitably qualified personnel.

Document prepared by:

John Moursounidis
Head of Reference Standards
30 July 2019

Checked by:

Boon Tan
Quality Manager
30 July 2019

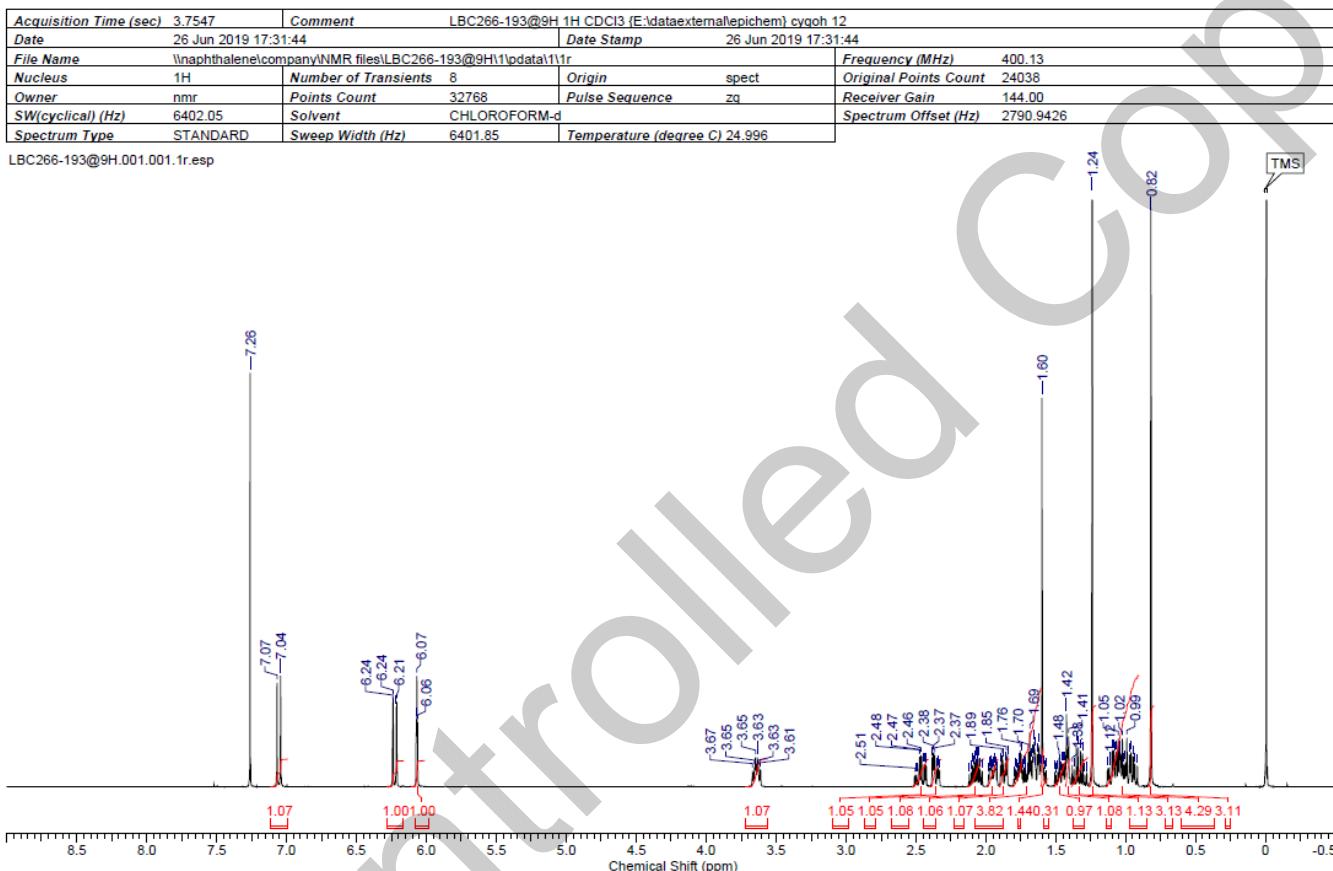
I. Identity

The identity of this product was established using the following analyses:

Ia. ^1H NMR Spectrum

Conditions: 400 MHz, CDCl_3

^1H NMR spectrum consistent with chemical structure.

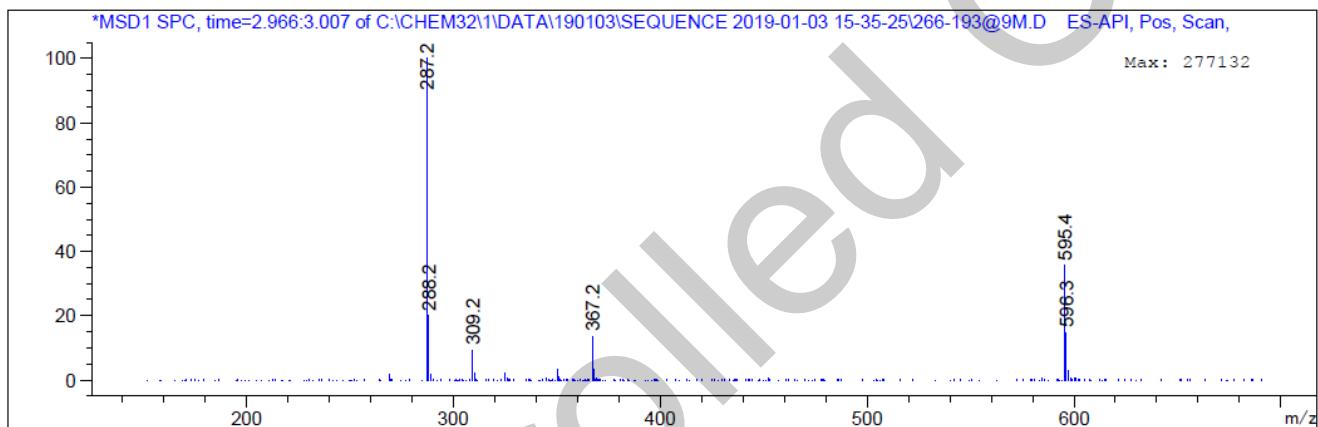


Ib. Mass Spectrum

The mass spectrum of this material was analysed by Liquid Chromatography Mass Spectroscopy (LCMS) using in-house EM005.WI08.

MS Signal: MSD1 TIC, MS File, ES-API, Pos, Scan, Frag: 70
Spectra averaged over upper half of peaks.
Noise Cutoff: 1000 counts.
Reportable Ion Abundance: > 10%.

Retention Time (MS)	MS Area	Mol. Weight or Ion
2.986	3914292	596.30 I
		595.40 I
		367.20 I
		288.20 I
		287.20 I

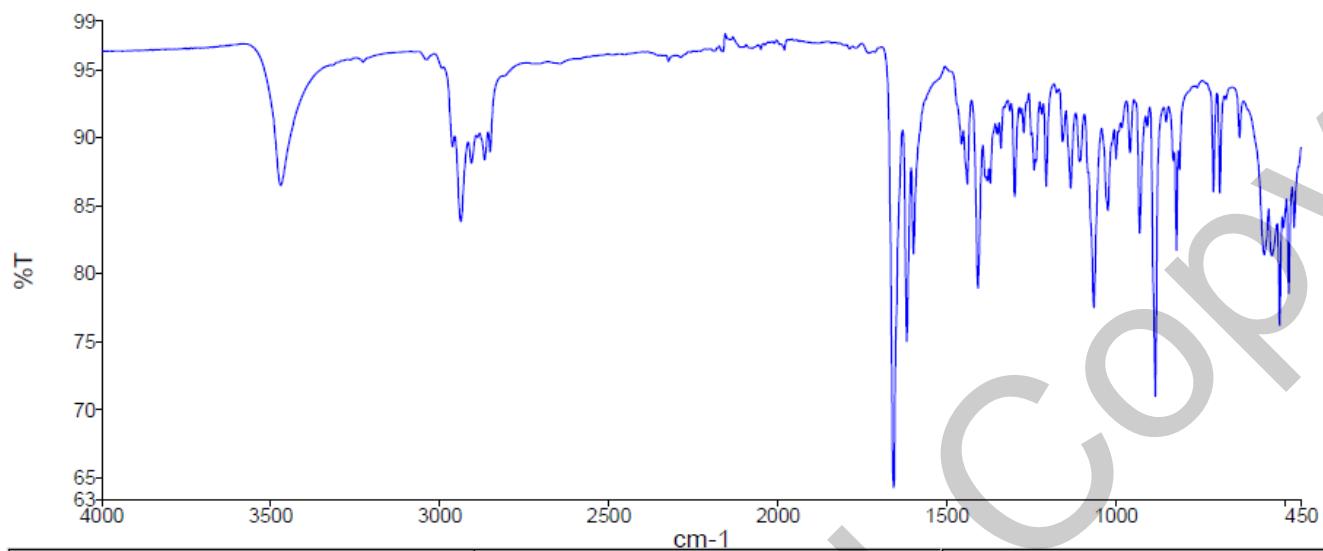


Theoretical value: 287.2 [M+H]⁺.

The signal of the Mass Spectrum is consistent with the theoretical value and its interpretation is consistent with the structural formula.

Ic. IR Spectrum

The infra-red spectrum of this material was analysed by Fourier-Transform Infrared Spectroscopy (FTIR) using in-house EM005.WI09.



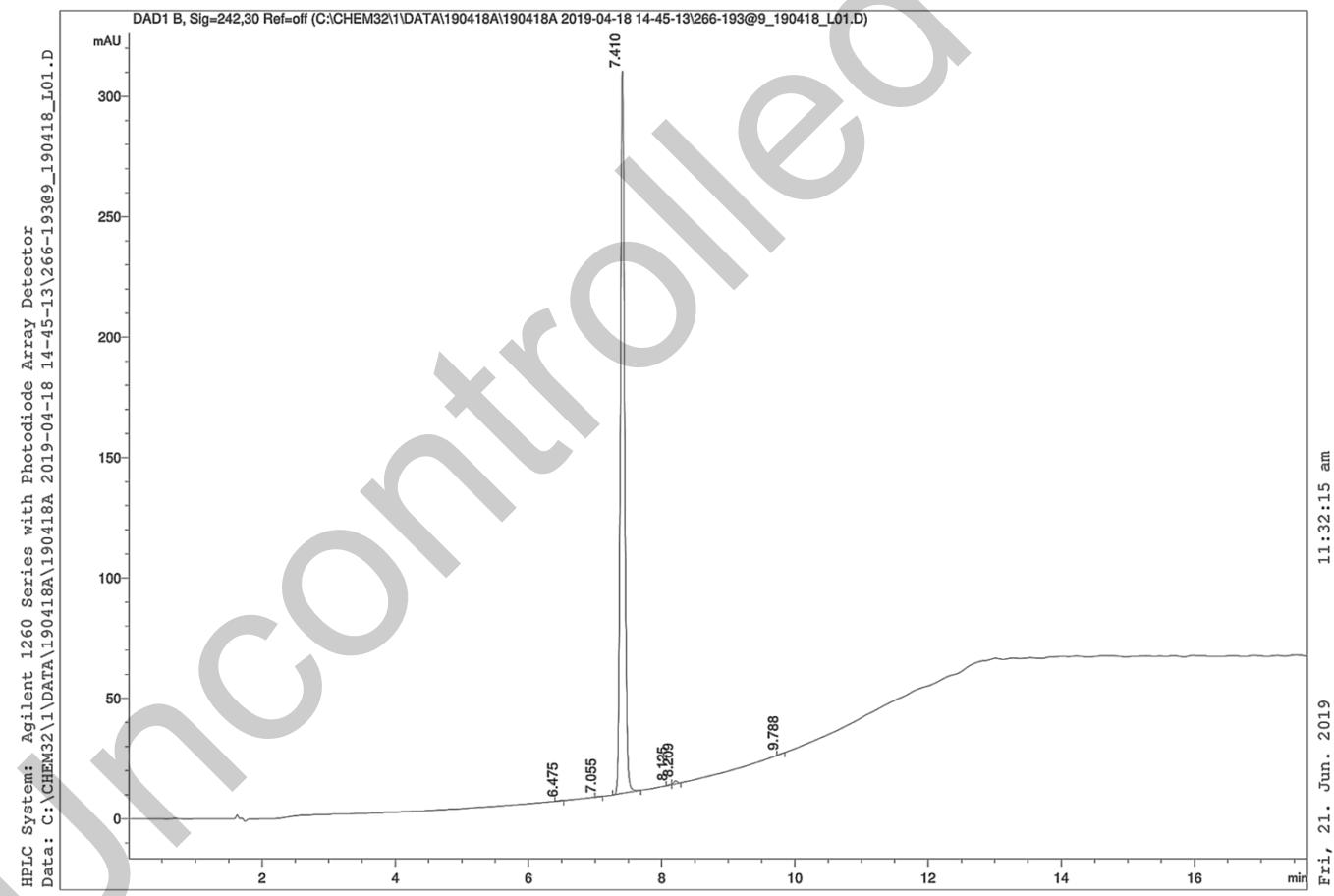
The interpretation of the signals of the Fourier-Transform Infrared Spectrum is consistent with the structural formula.

II. Purity

The purity of this material was analysed by high performance liquid chromatography (HPLC) using in-house EM005.WI07.

HPLC Conditions:

Column	Conditions				Detector	Injector
Agilent Zorbax SB-C18 4.6 x 250mm 5.0 micron	25°C				DAD 242nm	Auto 1.0 µL 1.0 mg/mL 100% acetonitrile
	Time (min)	% Line A (Water + 0.1% (v/v) TFA)	% Line B (Acetonitrile + 0.1% (v/v) TFA)	Flow rate (mL/min)		
	0.00	70	30	1.5		
	5.30	40	60	1.5		
	10.30	5	95	1.5		
	15.90	5	95	1.5		
	16.50	70	30	1.5		
	22.20	70	30	1.5		



Area Percent Report – Sorted by Signal

Peak Number	Retention Time (rounded)	Area	Area % (rounded)
1	6.48	0.51	0.04
2	7.05	0.26	0.02
3	7.41	1333.37	99.50
4	8.12	0.84	0.06
5	8.21	4.80	0.36
6	9.79	0.34	0.03
Totals			100 (rounded)

For the calculation the system peaks were ignored. The content of the analyte was determined as a ratio of the peak area of the analyte and the cumulative areas of the purities, added up to 100%.

Results:

Average 99.5% (average duplicate analyses)