
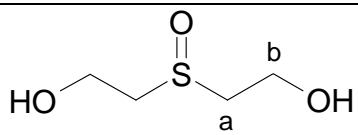


NMR SPECTROMETRY

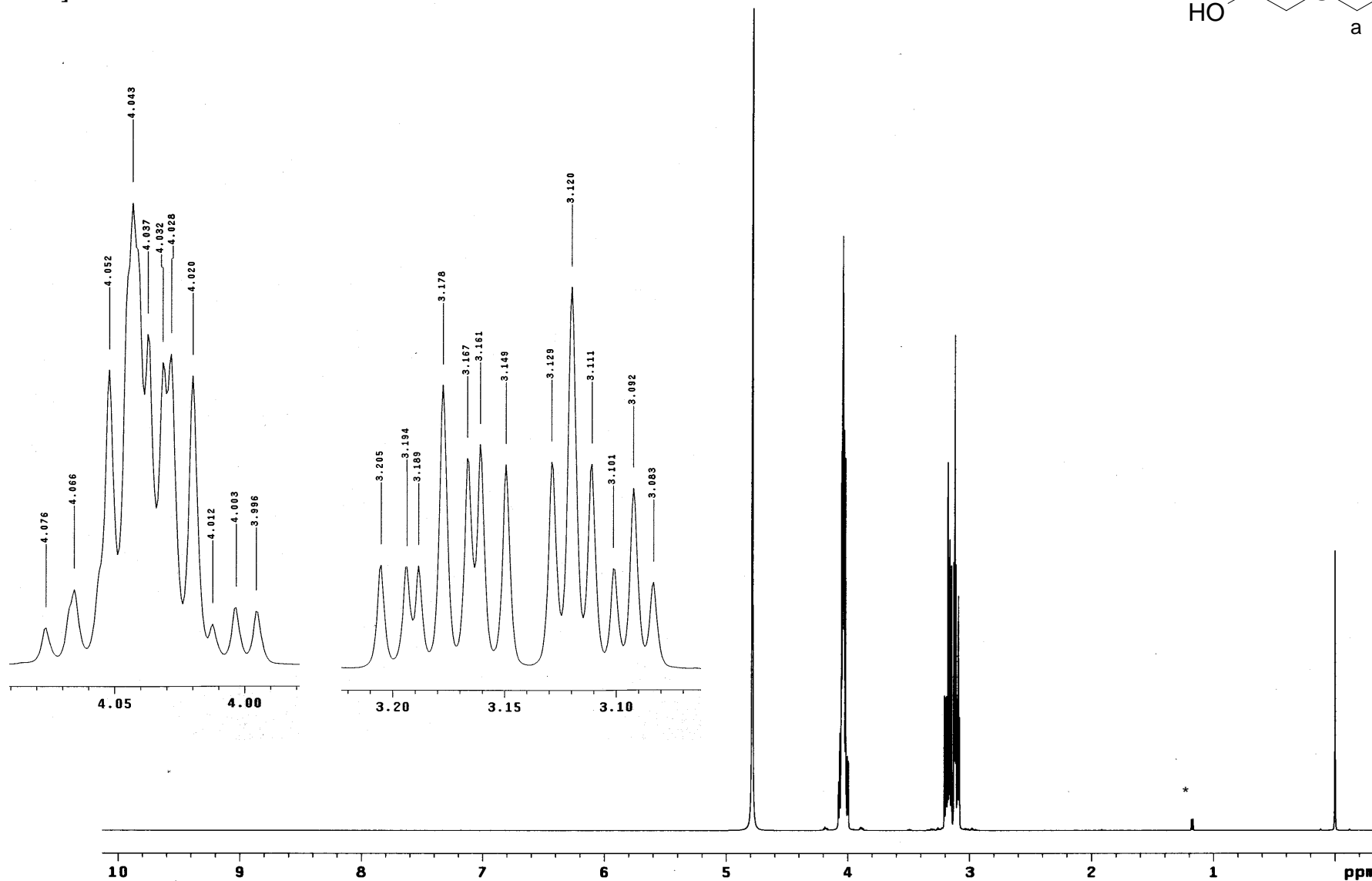
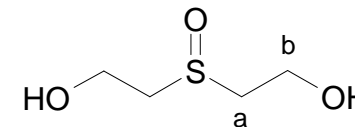
Contributor's name and address:		Verification Laboratory
Secretariat identification code	25-3-0031r (p1/2)	DSO National Laboratories
Signature		11 Stockport Road Singapore 117605
Chemical information:		
Chemical name	Bis(2-hydroxyethyl)sulfoxide	
Schedule number		
CAS registry number	3085-45-8	
Chemical structure with numbering of atoms		
Molecular formula	C ₄ H ₁₀ O ₃ S	
Sample information:		
Sample purity	99 %	
Sample concentration	50 mg/mL	
Solvent	D ₂ O	
pH	-	
Source	In-house synthesis CL02177	
Reference chemical shift (internal)	3-(Trimethylsilyl)propionic-2,2,3,3-d ₄ acid, 0 ppm	
Instrument information:		
Manufacturer	Varian, Inc.	
Model	Inova 500 MHz	
Spectrometer frequency	500 MHz	
Software version	VNMR version 6.1C	
Experimental information:		
Nucleus measured	¹ H	
Sample temperature	25 °C	
Spectral width (Hz)	5252.1	
Data points in Fourier transformed spectrum	32768	
Repetition time	12 s	
Pulse angle (μs and degrees)	3.462 μs, 45°	
Date of experiment	3 Jun 2005	
Data points in FID	31480	
Number of scans	16	
Baseline correction	Yes	
Spectral information:		
Chemical shifts (ppm) assigned except for acidic protons	Ha = 3.08 – 3.21, Hb = 3.99 – 4.08	
Coupling constants (Hz)	-	

25-3-0031r (p2/2)

Bis(2-hydroxyethyl)sulfoxide (C₄H₁₀O₃S)

[3085-45-8]

¹H NMR



Res.Freq: 499.662 MHz
Solvent: D₂O
Temperature: 25°C
Concentration: 50 mg/mL
Reference: TSPA-d₄ (internal)

Spectral Width: 5252.1 Hz
Data points [FID]: 31480
Data points [Spectrum]: 32768
Pulse width: 3.462 μs, 45°
Number of Scans: 16

Line broadening: no
Rep. time: 12 s
Resolution: 0.3 Hz (TMS)
Baseline correction: Yes
Instrument: Varian INOVA 500

Nuc δ[ppm]
a: 3.08 – 3.21
b: 3.99 – 4.08