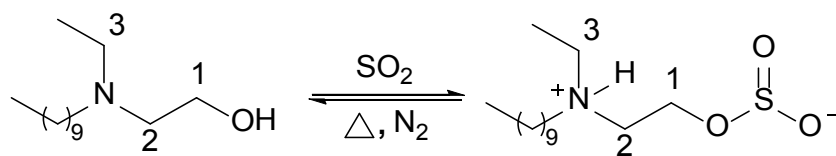


Electronic Supplementary Information

Efficient SO₂ capture by amine functionalized PEG

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Scheme S1. The reaction between DEAE and SO_2 .

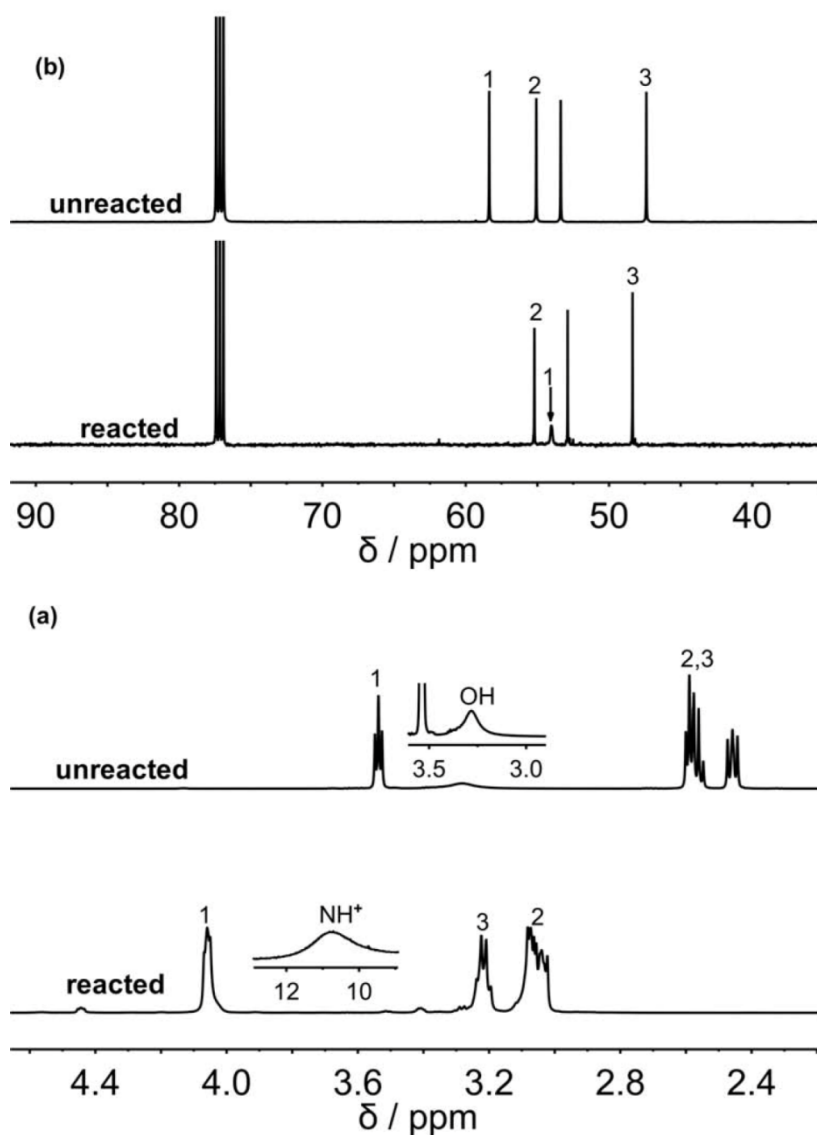


Fig. S1 (a) ^1H NMR (500 MHz, CDCl_3) and (b) ^{13}C NMR (125.8 MHz, CDCl_3) spectra of DEAE before and after uptake of SO_2 .

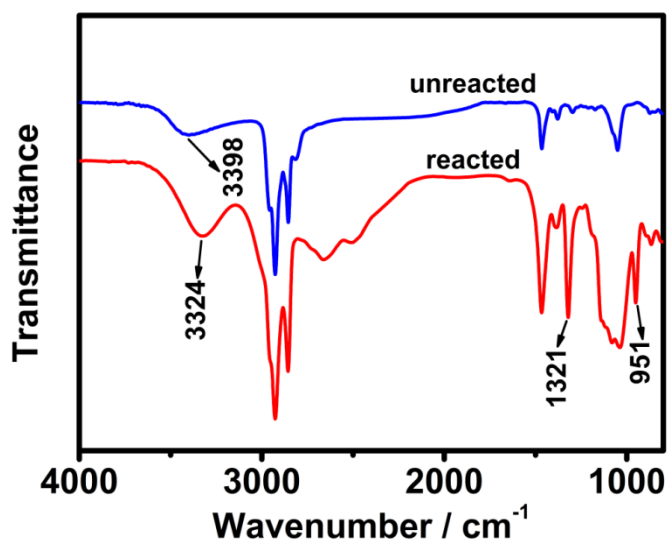


Fig. S2 FTIR spectra of DEAE before and after reaction with SO₂.

Table S1. NMR data of DEAE with and without SO₂.

H/C	DEAE		DEAE-SO ₂	
	¹ H	¹³ C	¹ H	¹³ C
1	3.54	58.4	4.06	54.0
2	2.58	55.1	3.06	55.2
3	2.58	47.4	3.21	48.4
OH/NH	3.28	—	10.71	—

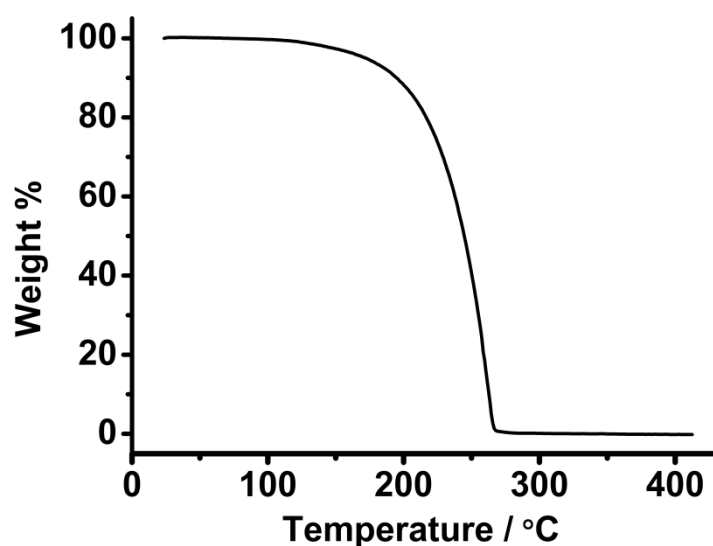


Fig. S3 Thermogram of the EE₃AE at a heating rate of 10 °C/min.