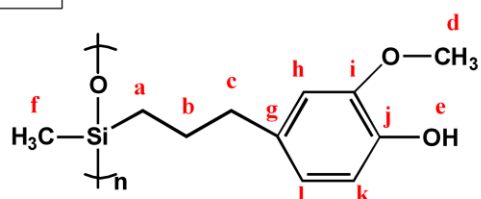


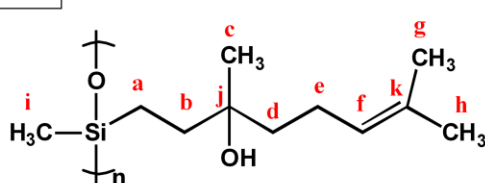
Hybrid bio-based silicone coatings with antiadhesive properties

Supporting Information

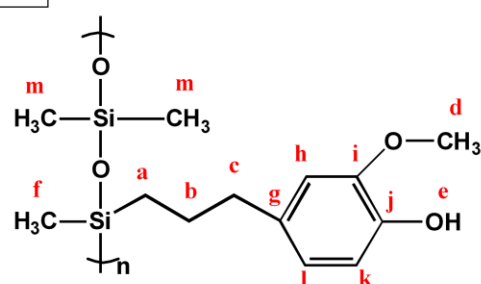
P-E-100



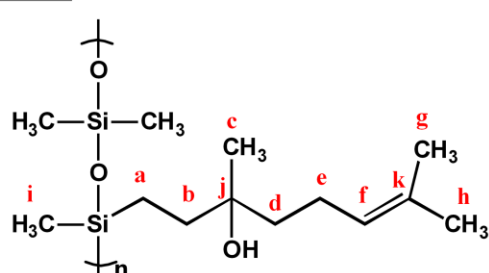
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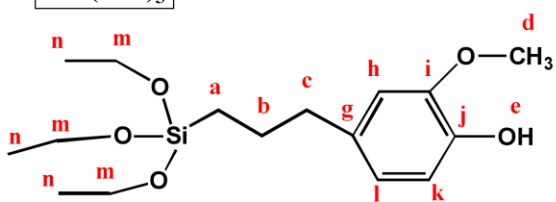
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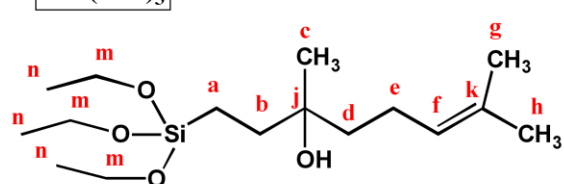
P-L-50



E-Si(OEt)₃

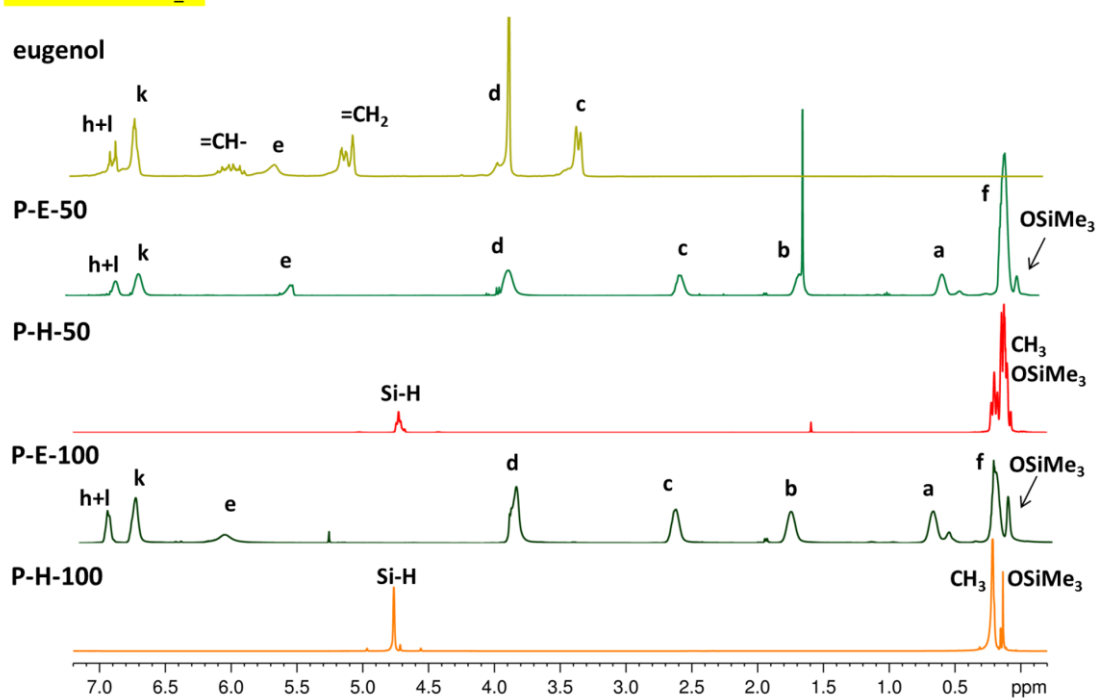


L-Si(OEt)₃



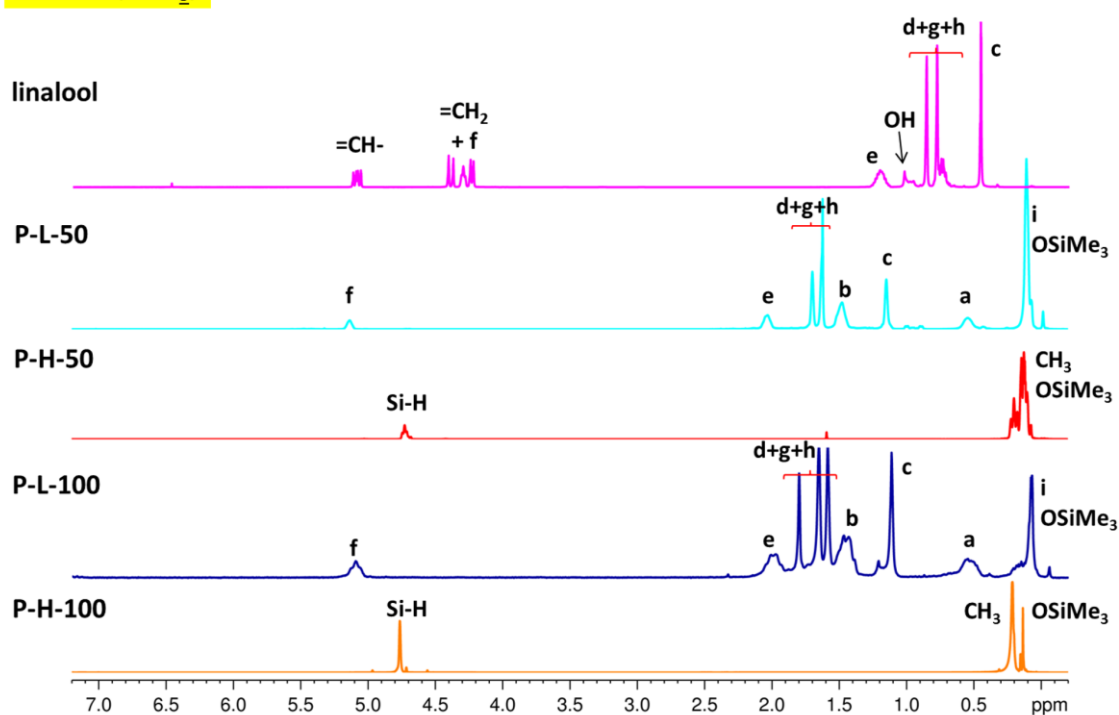
Scheme S1. Chemical structure assignment of the synthesized organosilicon derivatives of eugenol and linalool.

^1H NMR (CDCl_3)



(a)

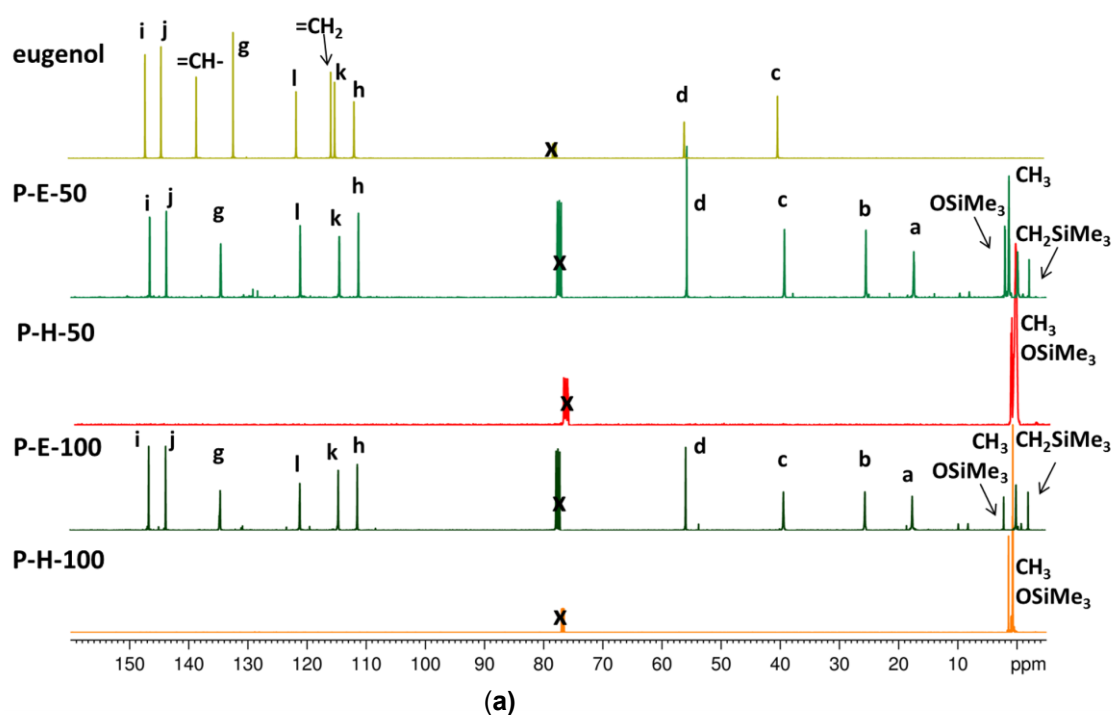
^1H NMR (CDCl_3)



(b)

Figure S1. (a) ^1H NMR spectra of linear polysiloxanes grafted with eugenol (compared to their precursors P-H-100 and P-H-50). (b). ^1H NMR spectra of linear polysiloxanes grafted with linalool (compared to their precursors P-H-100 and P-H-50).

¹³C NMR (CDCl₃)



¹³C NMR (CDCl₃)

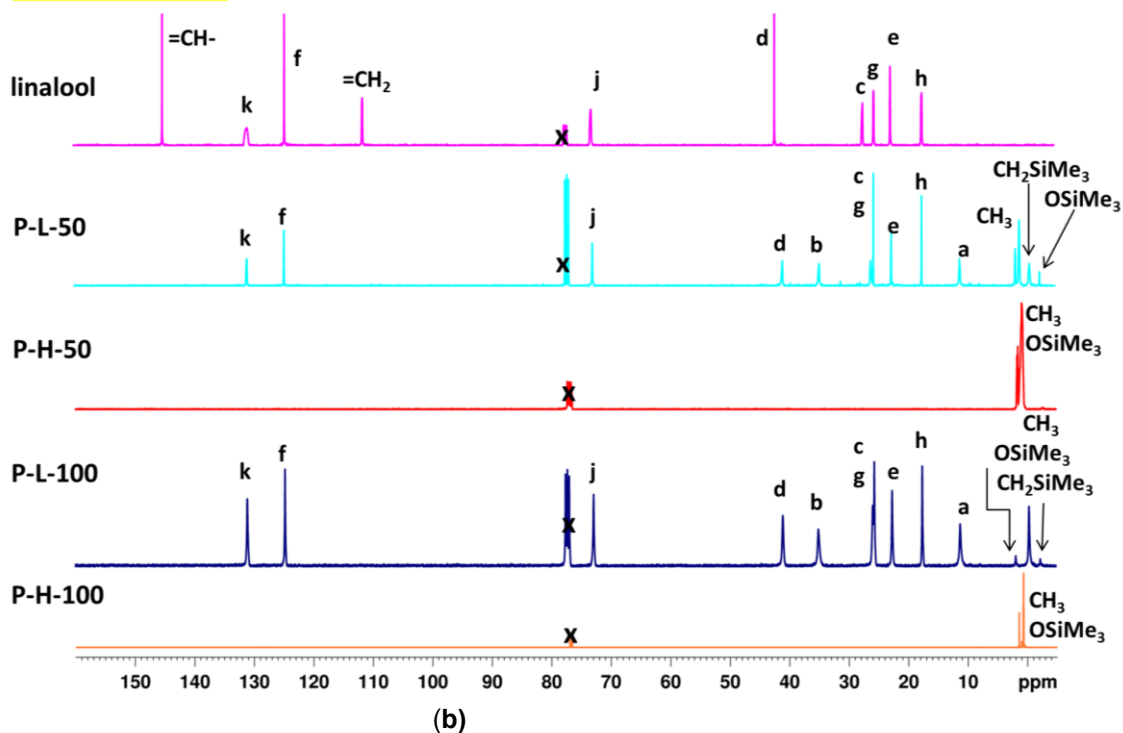
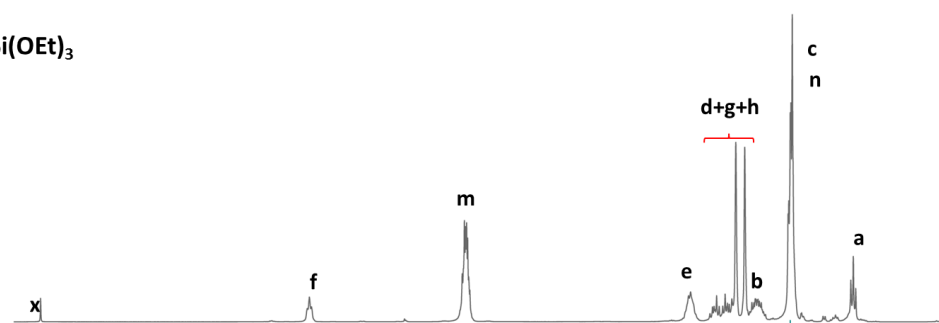


Figure S2. (a). ¹³C NMR spectra of linear polysiloxanes grafted with eugenol (compared to their precursors P-H-100 and P-H-50). **(b).** ¹³C NMR spectra of linear polysiloxanes grafted with linalool (compared to their precursors P-H-100 and P-H-50).

^1H NMR (CDCl_3)

L-Si(OEt) $_3$



E-Si(OEt) $_3$

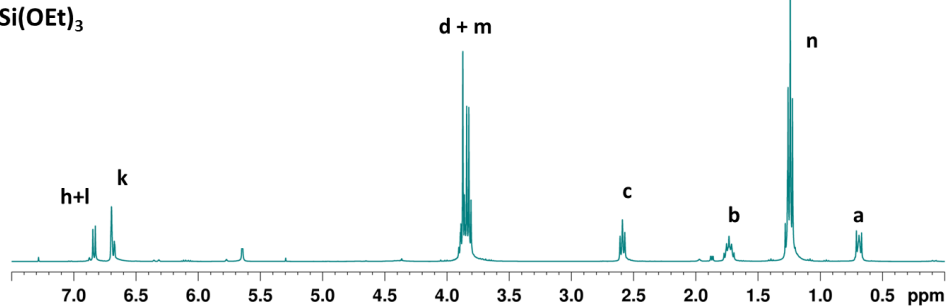
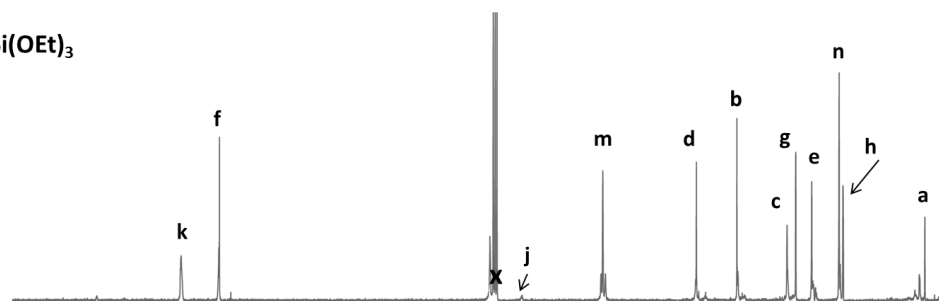


Figure S3. ^1H NMR spectra of the products obtained by hydrosilylation of linalool (a) and eugenol (b) with HSi(OEt)_3 .

^{13}C NMR (CDCl_3)

L-Si(OEt) $_3$



E-Si(OEt) $_3$

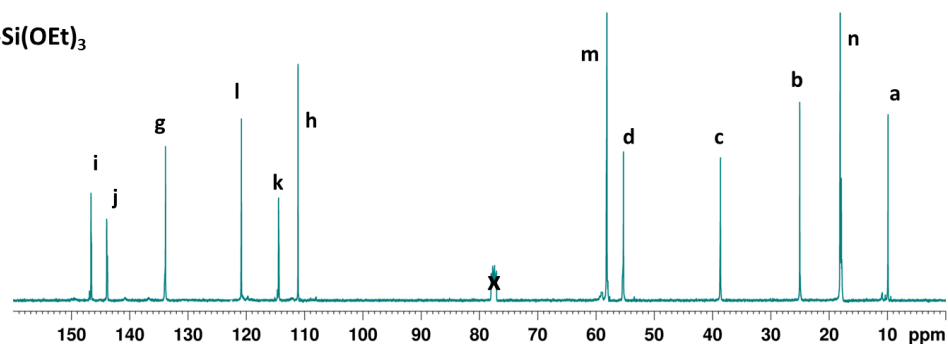


Figure S4. ^{13}C NMR spectra of the products obtained by hydrosilylation of linalool (a) and eugenol (b) with HSi(OEt)_3 .

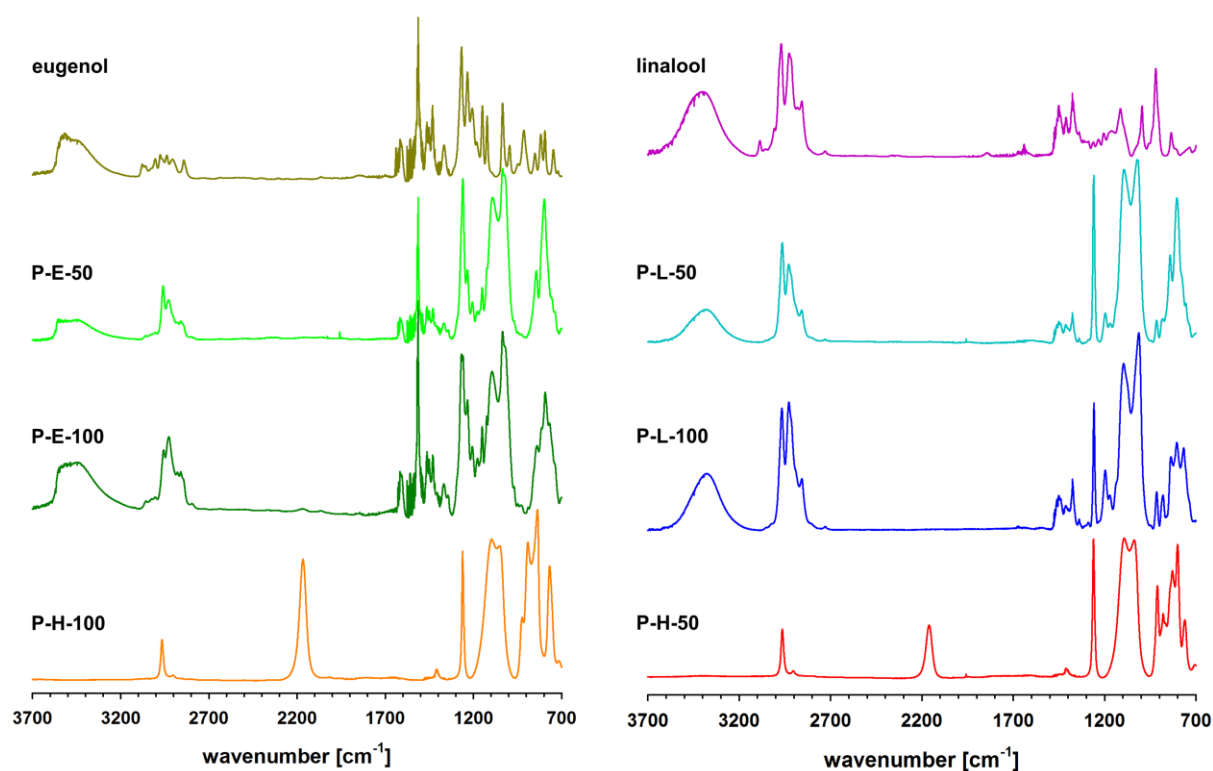


Figure S5. FT-IR absorbance spectra of linear polysiloxanes grafted with eugenol and linalool (compared to their precursors P-H-100 and P-H-50).

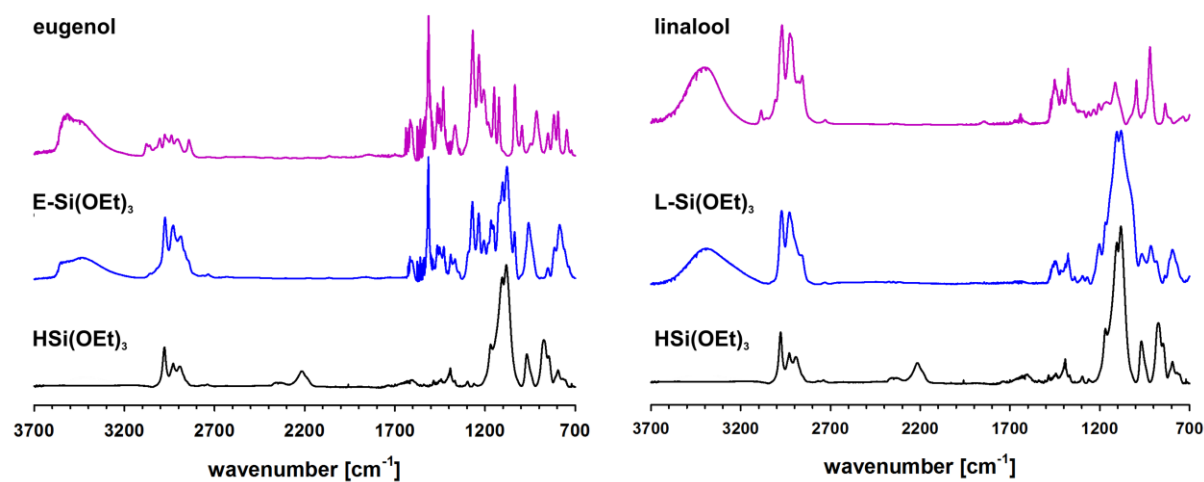


Figure S6. FT-IR absorbance spectra of spectra of the products obtained by hydrosilylation of linalool and eugenol with $\text{HSi}(\text{OEt})_3$.

Table S1. Assignment of peaks in IR spectra of functionalized organosilicon polymers and monomers.

	wavenumber [cm ⁻¹]					wavenumber [cm ⁻¹]			
vibration	Eugenol	P-E-100	P-E-50	E-Si(OEt) ₃	vibration	Linalool	P-L-100	P-L-50	L-Si(OEt) ₃
$\nu(\text{OH})$	3580-3260	3600-3260	3580-3270	3580-3240	$\nu(\text{OH})$	3640-3180	3580-3180	3600-3100	3600-3120
$\nu(\text{C-H})$	3100-2810	3040-2810	3050-2830	3050-2790	$\nu(\text{C-H})$	3040-2780	2990-2820	2962-2860	3000-2840
$\nu(\text{C}=\text{C})_{\text{arom}}$	1609	1609	1613	1613	$\nu(\text{CH}=\text{CH}_2)$	1642	-	-	-
$\nu(\text{C}=\text{C})_{\text{ring}}$	1511	1507	1511	1511					
$\omega(\text{CH}_3), \delta_{\text{s}}(\text{CH}_2)$	1434	1434	1421	1421	$\omega(\text{CH}_3), \delta_{\text{s}}(\text{CH}_2)$	1446	1458	1471	1446
					$\omega(\text{C-H})_{\text{vi}}$	1413	1413	1422	1417
$\delta(\text{COH})$	1372	1368	1364	1364	$\delta(\text{COH})$	1381	1372	1373	1377
$\delta \text{ Si-CH}_3$	-	1266	1262	-	$\delta \text{ Si-CH}_3$	-	1258	1258	-
$\nu(\text{C}_{\text{arom}}\text{-O-CH}_3)$	1237	1229	1238	1238					
$\delta \text{ Si-CH}_2$	-	1151	1151	1152	$\delta \text{ Si-CH}_2$	-	1196	1197	1201
$\nu(\text{Si-O-Si})$	-	1095 1035	1094 1033	-	$\nu(\text{Si-O-Si})$	-	1098 1017	1107 1022	-
$\nu(\text{Si-OEt})$	-	-	-	1102 1082	$\nu(\text{Si-OEt})$	-	-	-	1107 1078
$\tau(\text{C}=\text{C})$	996	-	-	-	$\tau(\text{C}=\text{C})$	1000	-	-	-
$\omega(=\text{CH}_2), \rho(=\text{CH}_2)$	911	-	-	-	$\omega(=\text{CH}_2), \rho(=\text{CH}_2)$	919	919	914	915
$\nu(\text{C-C})$ in Si-OEt	-			960	$\nu(\text{C-C})$ in Si-OEt	-	-	-	964
$\rho \text{ Si-CH}_3$	-	792	794	790	$\rho \text{ Si-CH}_3$	-	804	804	796