

Catalytic hydrosilylation of alkenes

Octyldiphenylsilane: ^1H NMR (400 MHz, CDCl_3) δ 7.55-7.31 (m, 10H), 4.85 (s, 1H), 1.41-1.12 (m, 14H), 0.86 (t, $J = 6.8$ Hz, 3H). ^{13}C NMR (101 MHz, CDCl_3) δ 135.2, 134.8, 129.5, 128.0, 33.3, 32.0, 29.3, 24.5, 22.8, 14.2, 12.2.

Dodecenediphenylsilane: ^1H NMR (400 MHz, CDCl_3) δ 7.62-7.28 (m, 10H), 4.85 (t, $J = 3.6$ Hz, 1H), 1.28 (dd, $J = 31.1, 9.2$ Hz, 22H), 0.88 (t, $J = 6.7$ Hz, 3H). ^{13}C NMR (101 MHz, CDCl_3) δ 135.18, 134.77, 134.40, 129.50, 127.98, 33.24, 31.99, 29.72, 29.60, 29.42, 29.28, 24.45, 22.76, 17.08, 14.19, 12.19.

Tetradecene diphenylsilane: ^1H NMR (400 MHz, CDCl_3) δ 7.47-7.25 (m, 10H), 4.77 (s, 1H), 1.17 (d, $J = 11.2$ Hz, 26H), 0.80 (s, 3H). ^{13}C NMR (101 MHz, CDCl_3) δ 135.6, 135.5, 135.2, 134.8, 134.4, 129.5, 128.0, 33.2, 32.0, 29.7, 29.7, 29.6, 29.4, 29.3, 24.4, 22.8, 14.2, 12.2.

3-(diphenylsilyl)propyl acetate: ^1H NMR (400 MHz, CDCl_3) δ : 7.48-7.28 (m, 10H), 4.81 (s, 1H), 3.98 (t, $J = 6.8$ Hz, 2H), 1.95 (s, 3H), 1.74-1.65 (m, 2H), 1.12-1.06 (m, 2H). ^{13}C NMR (101 MHz, CDCl_3) δ : 171.2, 135.2, 134.4, 129.8, 128.2, 66.6, 23.8, 21.1, 8.5.

Phenethyldiphenylsilane: ^1H NMR (400 MHz, CDCl_3) δ : 7.56-7.16 (m, 15H), 4.89 (s, 1H), 2.81-2.70 (m, 2H), 1.50 (s, 3H). ^{13}C NMR (101 MHz, CDCl_3) δ : 144.2, 135.3, 134.2, 129.8, 128.5, 128.2, 128.0, 125.8, 30.5, 14.4.

(4-fluorophenethyl)diphenylsilane: ^1H NMR (400 MHz, CDCl_3) δ : 7.50-6.82 (m, 14H), 4.80 (t, $J = 3.7$ Hz, 1H), 2.69-2.61 (m, 2H), 1.40 (m, 2H). ^{13}C NMR (101 MHz, CDCl_3) δ : 160.1, 135.22, 134.0, 129.8, 129.3, 129.2, 128.2, 115.2, 115.0, 29.8, 14.6.

(4-chlorophenethyl)diphenylsilane: ^1H NMR (400 MHz, CDCl_3) δ : 7.49-6.72 (m, 14H), 4.80 (s, 1H), 2.70-2.56 (m, 2H), 1.43-1.37 (m, 2H). ^{13}C NMR (101 MHz, CDCl_3) δ : 141.4, 135.2, 135.2, 134.2, 129.7, 129.1, 128.1, 127.8, 30.1, 14.5.

(4-methoxyphenethyl)diphenylsilane: ^1H NMR (400 MHz, CDCl_3) δ : 7.49-7.26 (m, 10H), 7.01 (d, $J = 8.6$ Hz, 2H), 6.72 (d, $J = 8.6$ Hz, 2H), 4.80 (s, 1H), 3.69 (s, 3H), 2.67-2.60 (m, 2H), 1.43-1.37 (m, 2H). ^{13}C NMR (101 MHz, CDCl_3) δ : 157.8, 136.5, 135.2, 134.2, 129.7, 128.8, 128.1, 113.8, 55.3, 29.6, 14.6.

triethoxy(phenethyl)silane: ^1H NMR (300 MHz, CDCl_3) δ : 7.3-7.2 (m, 5H), 3.89 (q, $J = 7.0$ Hz, 6H), 2.80-2.74 (m, 2H), 1.27 (t, $J = 7.0$ Hz, 9H), 1.06-1.00 (m, 2H). ^{13}C NMR (75 MHz, CDCl_3) δ : 144.6, 128.3, 127.8, 125.6, 58.4, 28.3, 18.3, 12.5.