

Supporting Information

Metal Organic Frameworks Based Catalysts for CO₂ Conversion

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Entry	Catalyst	Substrate	Experimental conditions	Conversion	Yield	Ref.
1.	SiO ₂ -1(I)	Styrene oxide	100 °C, 1 atm., 20.5 h	91	89	¹
2.	SiO ₂ -1(Br)	Styrene oxide	100 °C, 1 atm., 20.5 h	79	74	¹
3.	SiO ₂ -1 (Cl)	Styrene oxide	100 °C, 1 atm., 20.5 h	37	19	¹
4.	SiO ₂ -2(I)	Styrene oxide	100 °C, 1 atm., 20.5 h	72	60	¹
5.	SiO ₂ -3(I)	Styrene oxide	100 °C, 1 atm., 20.5 h	85	78	¹
6.	SiO ₂ -4(I)	Styrene oxide	100 °C, 1 atm., 20.5 h	83	72	¹
7.	SiO ₂ -5(I)	Styrene oxide	100 °C, 1 atm., 20.5 h	87	68	¹
8.	SiO ₂ -6(I)	Styrene oxide	100 °C, 1 atm., 20.5 h	67	51	¹
9.	SiO ₂ -7(I)	Styrene oxide	100 °C, 1 atm., 20.5 h	94	89	¹
10.	SiO ₂ -C ₃ H ₆ -MAP	Styrene oxide	100 °C, 1 atm., 20.5 h	42	Trace	¹
11.	SiO ₂ -C ₃ H ₆ -1	Styrene oxide	100 °C, 1 atm., 20.5 h	36	Trace	¹
12.	SiO ₂ -2 (Br)	Epichlorohydrin	100 °C 4 atm., 24 h	99	95	²
13.	SiO ₂ -2 (Br)	Styrene oxide		99	94	²
14.	SiO ₂ -3-(triethoxysilyl) propyltriphenylphosphonium	1,2-epoxyhexane	90 °C, 9.9 atm., 6h	-	99	³
15.	SiO ₂ -3-(triethoxysilyl) propyltriphenylphosphonium	Styrene oxide	90 °C, 9.9 atm., 6h	-	86	³
16.	(PS)-CH ₂ -P ⁺ (Bu) ₃ Cl ⁻	Phenylglycidol	60 °C, 1atm., 24 h	-	62	⁴
17.	(PS)-(CH ₂) ₇ -P ⁺ (Bu) ₃ Cl ⁻	Phenylglycidol	60 °C, 1atm., 24 h	-	74-86	⁴

Table S1. Cycloaddition of CO₂ to epoxides using silica and polymer supported ammonium salts

Reference

1. K. Motokura, S. Itagaki, Y. Iwasawa, A. Miyaji and T. Baba, *Green Chemistry*, 2009, **11**, 1876-1880.
2. A. R. Hajipour, Y. Heidari and G. Kozehgary, *RSC Advances*, 2015, **5**, 22373-22379.
3. T. Sakai, Y. Tsutsumi and T. Ema, *Green Chemistry*, 2008, **10**, 337-341.
4. T. Nishikubo, A. Kameyama, J. Yamashita, M. Tomoi and W. Fukuda, *Journal of Polymer Science Part A: Polymer Chemistry*, 1993, **31**, 939-947.

