Solvent-free conversion of glycerol to solketal catalysed by activated carbons functionalised with acid groups

Raphael Rodrigues, Maraisa Gonçalves, Dalmo Mandelli, Paolo P. Pescarmona^{*} and Wagner A. Carvalho^{*}

Supporting Information

Table S1. Acetalisation of acetone with glycerol at room temperature over the pyrolysed AC-N-15M and AC-S-18M catalysts (glycerol:acetone molar ratio of 1:1, 2.7 wt% of catalyst, 6 h, T = 298K). The pyrolysis consisted of a thermal treatment at 923 K for 1 h under N₂-flow (100 mL min⁻¹).

	Total acid sites ^a (mmol g ⁻¹)	Stronger acid sites ^a (mmol g ⁻¹)	Glycerol Conversion (%)	Solketal Selectivity (%)	6MR Selectivity (%)
AC-N-15M-923K	0.13	0.008	1	74	26
AC-S-18M-923K	0.07	0.003	0.4	76	24

^a Determined by Boehm titration (see main text for details).