

Supplementary Material for

Methanolysis of Poly(lactic acid) Using Catalyst Mixtures and the Kinetics of Methyl Lactate Production

Fabio M. Lamberti¹, Luis A. Román-Ramírez³, Andrew P. Dove², Joseph Wood^{1*}

¹School of Chemical Engineering, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom

²School of Chemistry, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom

³London South Bank University, 103 Borough Road, London, SE1 0AA, United Kingdom

*Correspondence: J.Wood@bham.ac.uk

Contents

1 Stirring speed	3
2 Rate coefficients.....	3

1 Stirring speed

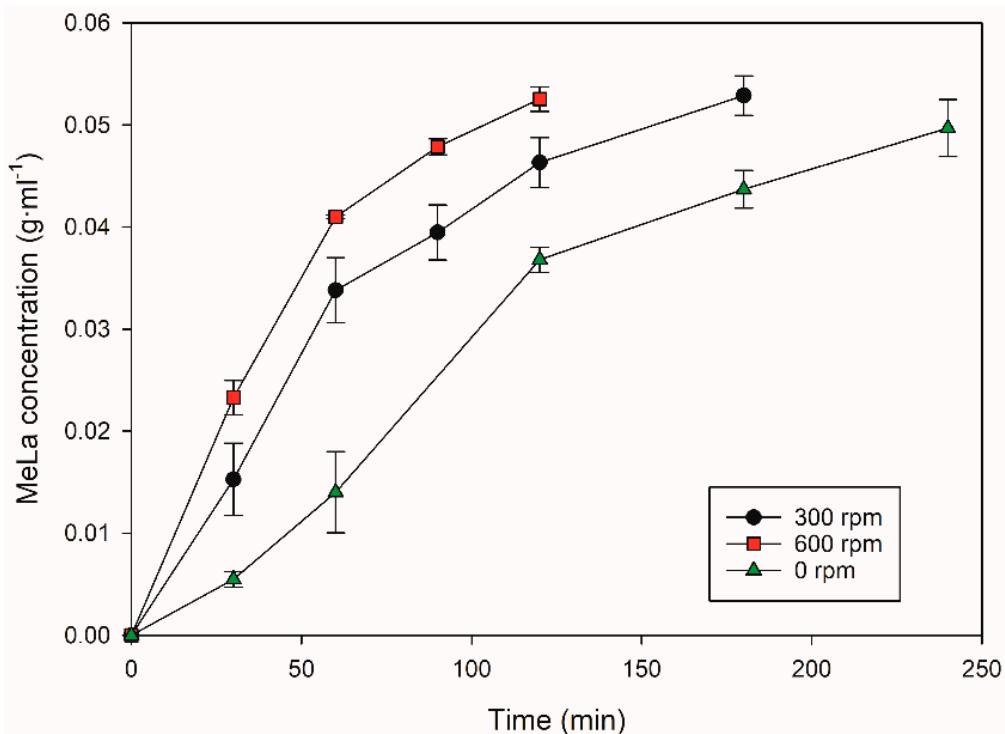


Figure S1. Methanolysis of 2 g of PLA at 130°C, 9 eq of MeOH and 2 mol% Zn(OAc)₂. Effect of Stirring speed on the MeLa concentration (g·mL⁻¹) vs. Time (min).

2 Rate coefficients

Table S1. Rate coefficients for each experiment, catalysed by Zn(OAc)₂.

Temperature (°C)	k ₁ (min ⁻¹)	k ₂ (min ⁻¹)	k ₋₂ (min ⁻¹)
130	0.0897	0.0914	0.0134
130	0.0843	0.0676	0.0118
120	0.0633	0.0537	0.0157
120	0.0667	0.0649	0.0104
110	0.0506	0.0519	0.0060
110	0.0496	0.0427	0.0054
100	0.0370	0.0366	0.0042
100	0.0458	0.0318	0.0050
90	0.0381	0.0425	0.0107
90	0.0388	0.0411	0.0090