**Read Me FL\_Dec2020**

**Grant Number**: (if applicable, if not N/A)

**Sponsor: EPSC**

**Project title**: Proposed Thesis Title: PhD Project: Tackling Recycling of Plastics via Reaction-Separation Engineering

The following files have been archived:

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| File name | File description (Short description of content, sample size, format, any linking between different types of data, i.e. survey and interviews/focus groups) |
| Ethanol Runs.csv | File contains the majority of preliminary ethanol experiments using either Zn(1)2 or Zn(2)2. Tables show different time samples during the experiment and the corresponding temperature and pressure of the reactor. Peak area data is given by the GC and from here we obtained the concentration. Also shown are the relative concentration of the PLA/oligomers/product given by the NMR (explained further in the publication). |
| Ethanol streamline.csv | File contains the final ethanol experiments using Zn(1)2. Tables show different time samples during the experiment and the corresponding temperature and pressure of the reactor. Peak area data is given by the GC and from here we obtained the concentration. Also shown are the relative concentration of the PLA/oligomers/product given by the NMR (explained further in the publication). Also shown is the rate constants and the resulting activation energy. |
| Propanol Runs.csv | File contains the majority of preliminary propanol experiments using either Zn(1)2 or Zn(2)2. Tables show different time samples during the experiment and the corresponding temperature and pressure of the reactor. Peak area data is given by the GC and from here we obtained the concentration. Also shown are the relative concentration of the PLA/oligomers/product given by the NMR (explained further in the publication). |
| Propanol streamline.csv | File contains the final propanol experiments using Zn(1)2. Tables show different time samples during the experiment and the corresponding temperature and pressure of the reactor. Peak area data is given by the GC and from here we obtained the concentration. Also shown are the relative concentration of the PLA/oligomers/product given by the NMR (explained further in the publication). Also shown is the rate constants and the resulting activation energy. |
| Butanol Runs.csv | File contains the majority of preliminary butanol experiments using either Zn(1)2 or Zn(2)2. Tables show different time samples during the experiment and the corresponding temperature and pressure of the reactor. Peak area data is given by the GC and from here we obtained the concentration. Also shown are the relative concentration of the PLA/oligomers/product given by the NMR (explained further in the publication). |
| Butanol streamline.csv | File contains the final butanol experiments using Zn(1)2. Tables show different time samples during the experiment and the corresponding temperature and pressure of the reactor. Peak area data is given by the GC and from here we obtained the concentration. Also shown are the relative concentration of the PLA/oligomers/product given by the NMR (explained further in the publication). Also shown is the rate constants and the resulting activation energy. |
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**Publications**: (based on this data, if any) Kinetics of alkyl lactate formation from the alcoholysis of poly(lactic acid)