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Burns, Katharine, Ingram, Ian DV, Potgieter, Herman and Potgieter-Vermaak, Sanja (2023) Synthesis and performance evaluation of novel soybean oil-based plasticisers for polyvinyl chloride (PVC). [Dataset] (Unpublished)

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## README FILE TEMPLATE

**Dataset title:** Synthesis and performance evaluation of novel soybean oil-based plasticisers for polyvinyl chloride (PVC).

**License:** Open Access (CC-BY-0 Public Domain Dedication)

**Access statement:** NMR files supplied in .jdf format which requires suitable software (e.g. MestreNova, JEOL NMR software). All other files supplied as .csv or .xlsx

**Grant Number:** N/A

The following files have been archived:

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)
DMA	Exported data files for the Dynamic Mechanical Analysis of plasticised PVC cast films measured in tensile mode, in .csv format.
FTIR	FTIR spectra collected in ATR mode of ESBO and the four plasticisers synthesised in this work. These files have been converted to .csv.
NMR Folder – H NMR	H NMR spectra of the four products synthesised in this work.
NMR Folder – C NMR	C NMR spectra of the four products synthesised in this work.
NMR Folder – DOSY	DOSY NMR spectra of the four products synthesised in this work.
Tensile Testing	Exported graph data for all samples of plasticised PVC tested for tensile elongation and load, also converted to stress.
TGA	Thermogravimetric analysis data for plasticisers and plasticised PVC samples. The data for the two groups are presented on separate sheets within the file. Mass loss is presented as a percentage of the initial mass of the sample.

**Publications:** Synthesis and performance evaluation of novel soybean oil-based plasticisers for polyvinyl chloride (PVC) – To be submitted to European Polymer Journal.