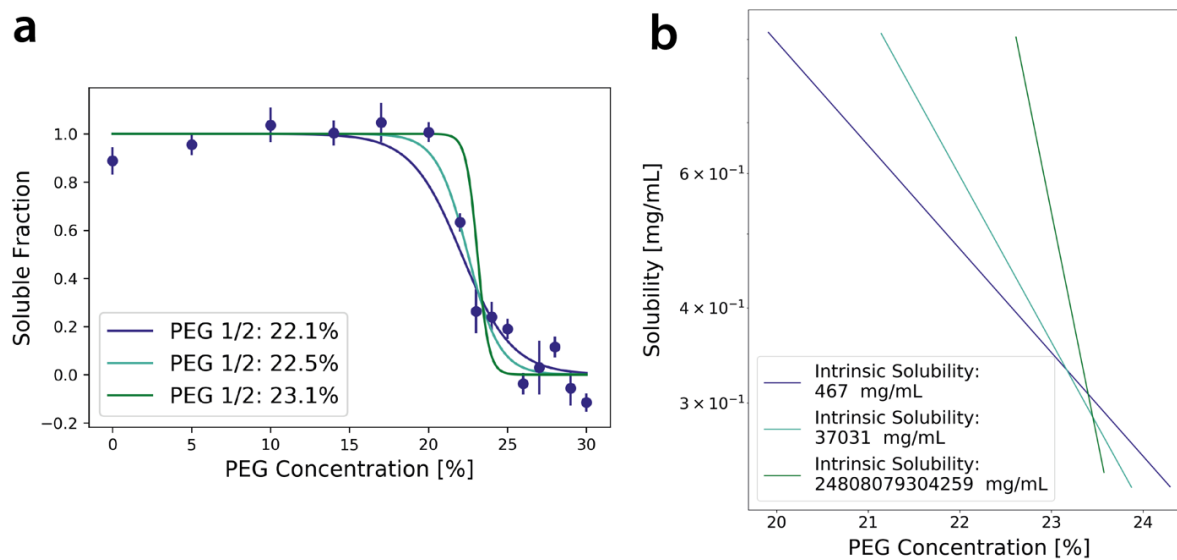


## Supporting Information



**Figure S1. Small experimental or fitting errors can cause extreme errors in the calculation of the solubility. (a)** Three sigmoidal fits through the same experimental data representing the 2.5% (blue), 50% (purple), and 97.5% (green) percentiles of the bootstrapped fitting parameters yielding the best PEG<sub>1/2</sub> and its C.I. (legend). The three fits result in very similar PEG<sub>1/2</sub> values, indicating a narrow C.I. **(b)** Extrapolation of the sigmoidal fits using the fitted slopes from panel A results in 11 orders of magnitude difference in the estimate of the apparent solubility (legend).