

**Overview of the
Raw Data
belonging to the article**

Swelling of 9 polymers commonly employed for solvent-resistant nanofiltration membranes: a comprehensive dataset

This document contains an overview of all the data stored under DOI 10.4121/uuid:c454adaa-30ea-4831-99c0-f8d5f9a624e1 at.

Data types

The data is stored into three separate subfolders: *experimental data*, *analysed data*, and *model data*.

<i>Experimental data</i>	This folder contains all the raw data files measured by spectroscopic ellipsometry File formats: .SE and .iSE Native to software CompleteEase by J.A. Woollam (version 4.86)
<i>Analysed data</i>	This folder contains the analysis of the experimental data with the simple, uniform-layer model File format: .xlsx
<i>Special cases</i>	This folder contains the analysis of experimental data for which the simple, uniform-layer model could not be used File format: .xlsx
<i>Auxiliary data</i>	This folder contains the CompleteEase models and material constants used for the data modelling File formats: .XX and .XX

Data storage structure

<i>Sample</i>	A sample is a combination of polymer + solvent that can be measured multiple times
<i>Measurement</i>	A measurement on a single spot on a sample
<i>Measurement group</i>	Group of multiplicate measurement (used to increase the data accuracy)
()	Any parameter given in brackets is a variable

Every *sample* is identified by a unique identifier that is constructed as follows:
(DATE)_(#)_(POLYMER)

Both the *experimental data* and the *analysed data* are stored in a sub-folder having this identifier. To this identifier, extra information is stringed by underscores, resulting in a name that identifies a *measurement group*:

dry	Measurement on a dry polymer
_(solvent)_IS	Measurement in time, directly following solvent exposure
_(solvent)_afterIS_	Measurements in solvents after one day
_(solvent)_2wk_	Measurements in solvent after 2 weeks
_(solvent)_4wk_	Measurements in solvent after 4 weeks
_(solvent)_longterm_	Measurements in solvent after long term (> 6 weeks)
_(solvent)_redried_	Measurements in solvent after the sample was re-dried

To this name, a letter (A, B, C, ...) can be added to indicate individual *measurements*.

Experimental data is stored under a name identifying an individual *measurement*.
Analysed data is stored under a name identifying a *measurement group*.