

Supplementary Materials: Applicability of PolyActive™ Thin Film Composite Membranes for CO₂ Separation from C₂H₄ containing Multi-component Gas Mixtures at Pressures up to 30 bar

Karina Schuldt, Jan Pohlmann, Sergey Shishatskiy and Torsten Brinkmann

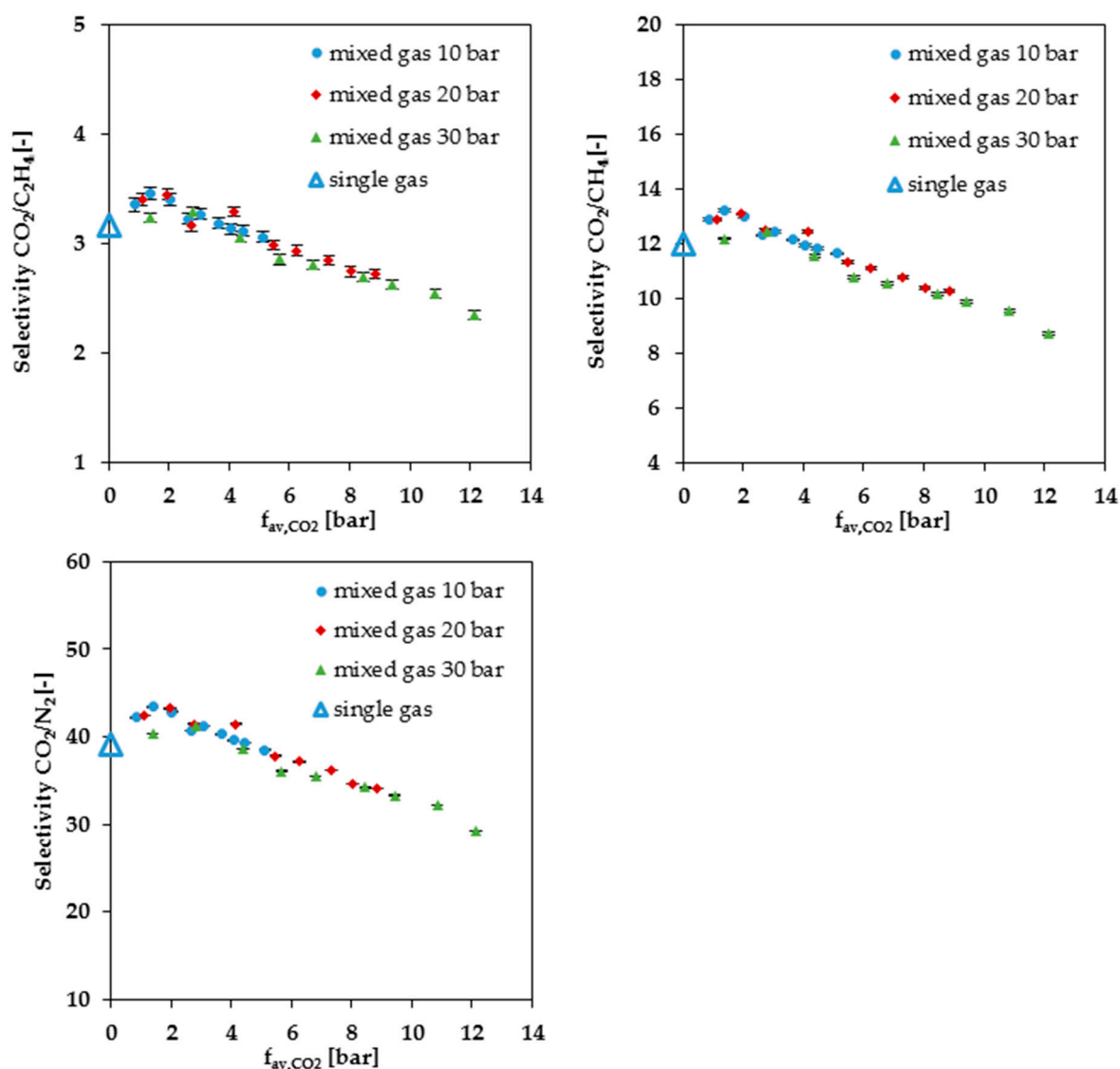


Figure S1. CO₂/C₂H₄, CO₂/CH₄ and CO₂/N₂ selectivity at 25 °C plotted against average CO₂ fugacity from mixed gas experiments. The open triangle represents single gas data acquired at low pressure (0–2 bar), i.e. pressure increase data where the plotted value was determined using the L_0 values of the Free-Volume model according to Equation (1). In this study, the selectivity is defined as the ratio of permeances.

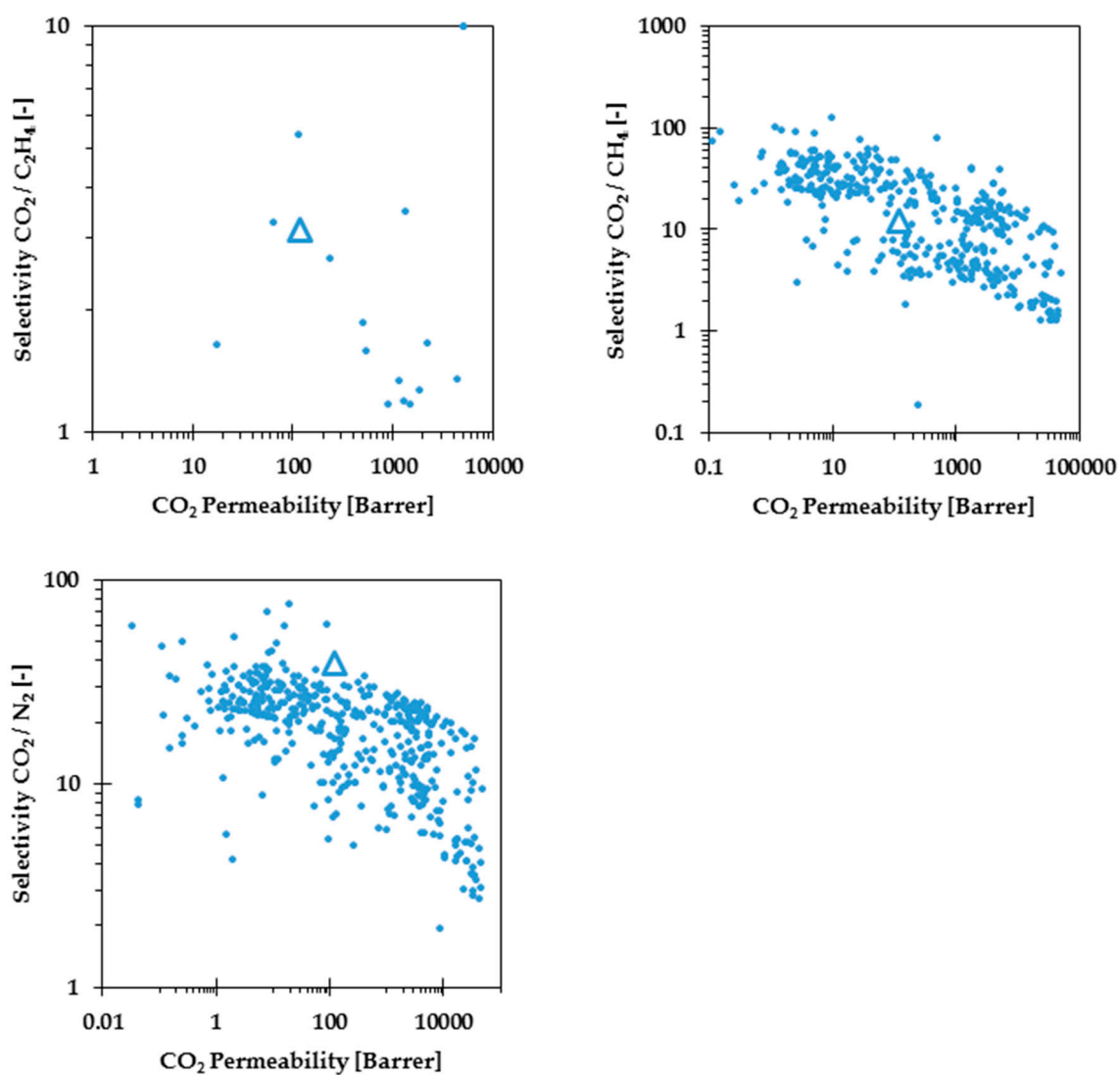


Figure S2. Position of the gas transport properties of PolyActive™ among those of polymers reported in the literature [1]. PolyActive™ is marked by open triangle.

Reference

1. Polymer gas separation membranes. Available online: <https://membrane-australasia.org/polymer-gas-separation-membranes/> (Accessed on 29 May 2018)