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# Improved route to a diphenoxide-based precursor for chemical vapour deposition of parylene AF-4

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In this work, we present the synthesis of an alternative precursor for chemical vapour deposition of parylene AF-4 to the widely used standard, octafluoro[2.2]paracyclophane. The standard precursor suffers from uncertainties in its supply chain and its synthesis is of low yield. A comparison between different reaction parameters and solvents is drawn by means of thermal, laboratory-scale and microwave-assisted reactions and quantitative nuclear magnetic resonance (qNMR) studies.