

Syntheses and Structures of 9-Bromo-10-diphenylphosphanylanthracene and its Oxidation Products

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Treatment of 9,10-dibromoanthracene with one mole equivalent of *n*-butyllithium and chlorodiphenylphosphane yields 9-bromo-10-diphenylphosphanylanthracene (**1**). Oxidation of **1** with chalcogens leads to $\{\text{Br}(\text{C}_{14}\text{H}_8)(\text{Ph}_2\text{P}=\text{E})\}$ with E = O (**2**), S (**3**) and Se (**4**). The syntheses and structure determinations of the parent compound **1** and the oxidized species **2** – **4** are reported.

Key words: Anthracene, Asymmetrical Synthesis, Phosphane, Phosphorylation, Selenium