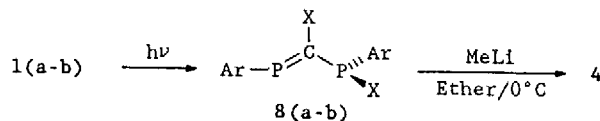


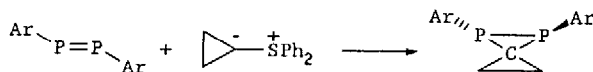
The 1,3-diphosphapropenes 8(a-b) obtained by photolysis of 1(a-b) give quantitatively 4 by action of methyllithium on at low temperature in diethyl ether.



In conclusion, the P-P bond cleavage of the halogeno-diphosphirane, by action of organo alkali metal compounds, is an efficient method for obtaining 1,3-diphosphapropene (8) or 1,3-diphosphaallene.

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- m.p. 160 °C; m/e (FD) = 593; ¹H nmr (300 MHz), CDCl₃) δ -0.18 (m, 2H, CH₂), 0.52 (m, 2H, CH₂), 1.24 (s, 18H, p-tBu), 1.54 (s, 32H, o-tBu), 7.12 (m, 4H, Ar). ¹³C nmr (CDCl₃) 136.30 (t, ¹J_{CP} = 38.5Hz, ²J_{CP} = 36Hz, 2C₁), 155.24 (t, ²J_{CP} = 3.25Hz, 4C₂), 121.6 (s, 4C₃), 146.90 (s, 2C₄), 38.36 (s, 4C₅), 37.59 (s, 2C₆), 34.17 (t, ⁴J_{CP} = 7Hz, 12C₇), 31.02 (s, 6C₈), 33.69 (t, ¹J_{CP} = 58Hz, C₉), 8.59 (t, ¹J_{CP} = 9Hz, C₁₀ and C₁₁).
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