Supplementary Materials.

Mercury-Substituted Silyl Radicals Intermediates in Formation and Fragmentation of Geminal Dimercury Silyl Compounds

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Figures 1-5 contain EPR-spectra observed during photolysis of 3a and 3b, oxidation of 1a, thermolysis of a mixture of t-Bu₂Hg and dihydrosilane 2a, and thermolysis of 3a.
Figure 1. EPR–spectrum observed during the photolysis (λ > 300 nm) of 3a in hexane solution at 200 K (at microwave radiation power of 100mW); the lines marked by “X” assigned to Hg-substituted silyl radical 8a (g = 1.983), while lines of silyl radical exhibiting a “regular” g-factor of 2.005 are marked by “*“.
Figure 2. EPR–spectra observed during the photolysis (λ > 300 nm) of 3b in hexane solution at 300 K (at microwave radiation power of 100mW); (a). The superposition of two Hg-substituted radicals, (marked by “7b” and “8b” assigned to radicals 7b (g = 1.983) and 8b (g = 1.984), respectively) accompanied by a silyl radical exhibiting a “regular” g-factor of 2.005 (marked by “*”) were observed after 30 seconds photolysis. (b) After 15 minutes photolysis the intensity of signals marked by “8b” increased in comparison to the intensity of signals marked by “7b” and “*”. 
Figure 3. EPR–spectra recorded during the oxidation of 1a by CuCl at 240 K (at microwave radiation power of 100mW); Lines of Hg-substituted silyl radical marked by “X” while lines of silyl radical (g = 2.0054) are marked by “*”.
Figure 4. EPR-spectra observed during thermolysis of a mixture of \( t \)-Bu\(_2\)Hg and dihydrosilane 2a
(a) EPR signals of \( t \)-Bu radical and the signal of a silyl radical \((g = 2.005\) marked by “*”) observed after 30 seconds of thermolysis at 80°C (EPR microwave radiation power 1 mW). (b) After 10 minutes of thermolysis at 80°C of the mixture (EPR microwave radiation power 200 mW); the signal with \( g = 1.983 \) was observed.
Figure 5. EPR-spectra observed during thermolysis (460 K) of 3a.