CCl_4 (δ, ppm): 1.05 s (3H, CH_3), 1.62 s (6H, $3CH_2$), 2.13-2.20 and 2.55-2.63 m (4H, CH_2), 2.4 s (1H, CH), 4.75 m (2H, CH_2=). ^{13}C NMR spectrum in $CDCl_3$ (δ, ppm): 23.05 (CH_3), 25.76 (H-C), 39.75 (cyclobutane CH_2), 46.85 (cycl. CH_2), 51.38 and 51.70 (C_{quat}), 106.71 (CH_2=), 145.23 (C=).

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REACTION OF BENZOYL PEROXIDE WITH THIOACETALS

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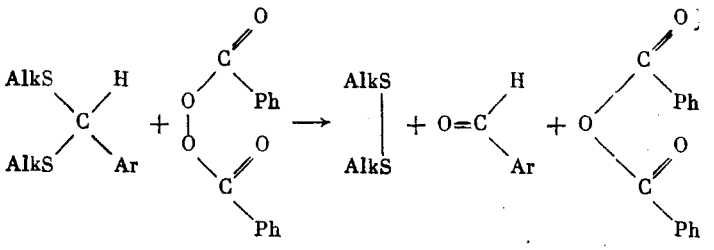
Several reaction sites of thioacetals (TA) may be altered upon reaction with benzoyl peroxide (BP). Thus, in the case of the TA of formaldehyde, the reaction leads to loss of hydrogen atoms from the geminal CH_2 group [1], while, in the case of acetaldehyde derivatives, the reaction also leads to loss of hydrogen atoms at the methyl substituent of the geminal carbon atom [2].

A study of the reaction of the TA of benzaldehyde or 9-anthracenecarbaldehyde with BP showed that the carbonyl precursor of the TA is found among the reaction products in 15 and 80% yields, respectively.



Thus, the reaction of TA containing an aromatic substituent at the geminal carbon atom with BP affects still another fragment of the TA molecule, namely, the C-S bond and may serve as a means for removal of the thioacetal protective group.

The reaction was carried out according to our reported procedure [1, 2]. The isolation and purification of the products was carried out chromatographically on silica gel with hexane as the eluent. The elemental analysis data and IR and PMR spectral indices were in accord with the results reported in the literature.

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