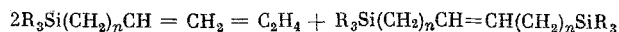


DISPROPORTIONATION OF UNSATURATED  
ORGANOSILICON COMPOUNDS

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Despite the fact that a large number of investigations [1] has been devoted to the disproportionation of olefins, information is absent in the literature on the possibility of accomplishing the indicated reaction for unsaturated compounds that contain a heteroatom. We established that the reaction for the disproportionation of organosilicon unsaturated compounds proceeds on a heterogeneous aluminomolybdenum catalyst at 100-140°. The general equation of the reaction



corresponds to its progress via a four-center intermediate complex. When the disproportionation of trimethylvinylsilane was run at 120° and a space velocity of 10 h<sup>-1</sup> the degree of conversion was 10% with a selectivity of 90%. The disproportionation products were ethylene and bis(trimethylsilyl)ethylene. The structure of the latter was confirmed by the IR spectra (characteristic band of a trans-olefinic group in the vicinity of 1000 cm<sup>-1</sup>) and the NMR spectra (the ratio of the intensities of the signals of the methyl and olefinic protons is 18.2:1.8).

The molecular mass, determined cryoscopically in benzene, was equal to 177. The disproportionation of the trialkylallylsilanes proceeds with a somewhat lower selectivity.

## LITERATURE CITED

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