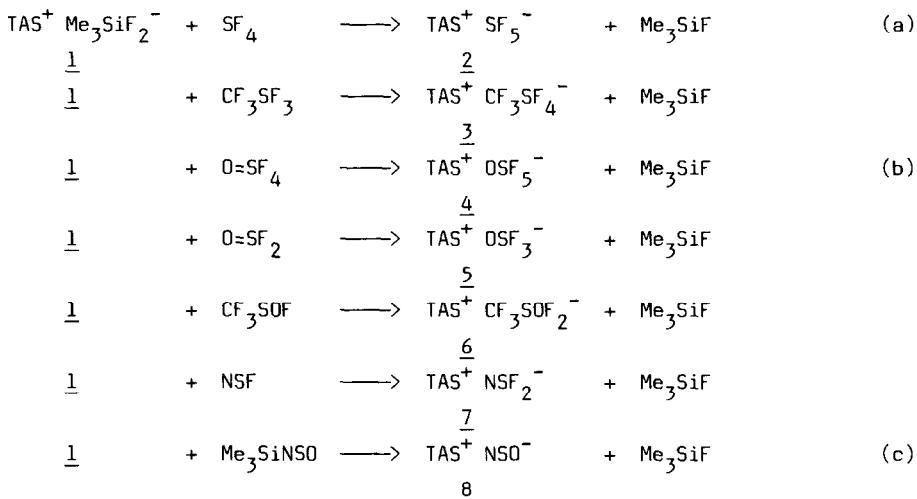


SYNTHESIS AND PROPERTIES OF SULFUR-ANIONS

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TAS-fluoride ($(\text{Me}_2\text{N})_3\text{S}^+ \text{Me}_3\text{SiF}_2^-$) is an extremely versatile fluoride-ion donor^{1,2)}. With this reagent we generated sulfur- and sulfur-nitrogen-anions by three routes: (a) coordination expansion of sulfur by the addition to low co-ordinated derivatives, (b) addition to sulfur multiple-bond species, and (c) cleavage of Si-N-bonds:



The TAS-salts are stable crystalline solids, which are readily soluble in polar organic solvents. The spectroscopic properties of the anions are discussed.

1 W.J. Middleton U.S.Pat. 3 940 402 (1976)

2 W.B. Farnham, B.E. Smart, W.J. Middleton, J.C. Calabrese, and D.A. Dixon
J. Amer. Chem. Soc., 107, 4565 (1985); cf. also B.E. Smart et al., Abstr.
7th Winter Fluorine Conference, Orlando, Florida, Feb. 1985.