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THERMAL DECOMPOSITION OF MESYLSULFENE-TRIETHYLAMINE-ADDUCT

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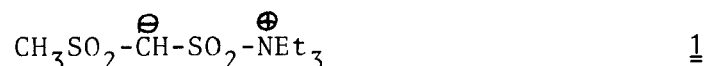
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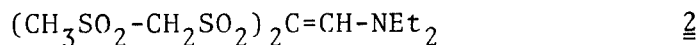
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Treatment of an acetonitrile solution of mesylchloride with triethylamine at -40°C leads to triethylammonium chloride and a solution of mesylsulfene-triethylamine-adduct 1, stable for several days at -40°C ¹⁾.

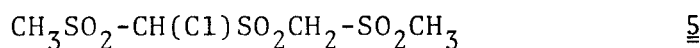
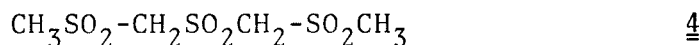


On warming up the reactivity of 1, e.g. in cycloaddition reactions, is lost. After slow warming up the solutions under anhydrous conditions, the following products could be isolated:

(1) decomposition products of adduct 1



(2) products following oligomerisation of mesylsulfene or its triethylamine-adduct



Some aspects of similar reactions will be presented and the mechanistic pathways discussed.

¹⁾ G. Opitz, M. Kleemann, D. Bücher, G. Walz and K. Rieth, Angew. Chem., Int. Ed. Engl. 5, 594 (1966).