SYNTHESIS AND REACTIONS OF PERHALO-1,3-DITHIETANES

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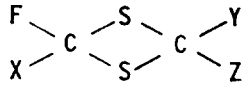
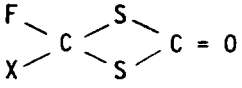
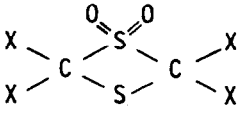
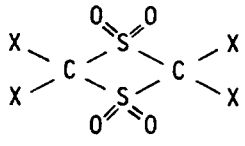
The synthesis of mixed substituted perhalo-1,3-dithietanes of type A, especially ($-CF_2-S-CCl_2-S-$), and their reactions forming 2-Oxo-1,3--dithietanes of type B will be described.
The oxidation of perhalo-1,3-dithietanes with different oxidation agents leads to the 1,1- and 1,1,3,3-Oxo-1,3-dithietanes respectively (type C). All compounds are verified by analysis and the different spectral data. 2,2,4,4-Tetrafluoro-1,1,3,3-tetraoxo-1,3-dithietan is an extremely symmetric molecule as could be shown by X-ray structure measurements.

A  X, Y, Z = F, Cl

B  X = Cl

C   X = F, Cl, Br