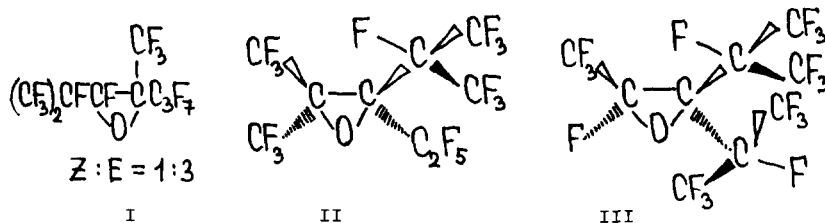


SYNTHESIS AND REACTIONS OF PERFLUORO- α -OXIDES DERIVED FROM TRIMERS OF HEXAFLUOROPROPENE

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α -Oxides of all three isomers of hexafluoropropene trimer can be made very conveniently by direct epoxidation of corresponding olefins, using aqueous sodium hypochlorite in the presence of a polar co-solvent (e. g. acetonitrile). Epoxidation proceeds readily and results in high yields of α -oxides (I - III). The epoxidation reaction's stereochemistry is discussed.



The behaviour of compounds (I - III) in reactions with some nucleophilic (CsF , Et_3N , LiAlH_4 , CH_3ONa) and electrophilic (SbF_5 , HSO_3F) agents is studied.

The effect of steric and electron factors on the reactivity behaviour of these materials will be discussed.