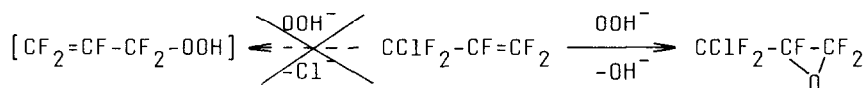


(CHLORODIFLUOROMETHYL)TRIFLUOROXYRANE: SYNTHESIS AND REACTIONS

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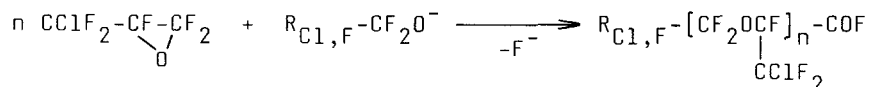
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The low-temperature nucleophilic reaction of 3-chloropentafluoropropene with alkaline hydrogen peroxide under the PTC conditions was studied. Instead of obvious Cl^- substitution, epoxidation took place to yield (chlorodifluoromethyl)trifluoroxyrane.



The title epoxide was reacted with various nucleophiles and electrophiles. For example, the hydrate of chlorodifluoropyruvic acid was obtained in a good yield by the reaction with water in dioxane.

The action of the 1st group metal fluorides or chlorofluoropropoxides on the title epoxide resulted in the formation of perhalogenated telomeric acyl fluorides.



The chemical behaviour of (chlorodifluoromethyl)trifluoroxyrane was found to be similar to that of trifluoro(trifluoromethyl)oxyrane and will be discussed further.