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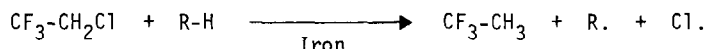
USE OF SOLVENTS/FLUORINATED REFRIGERANTS PAIRS IN ABSORPTION SYSTEMS

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Some aspects of stability problems encountered when using chlorofluorocarbons/solvents pairs in absorption systems are presented.

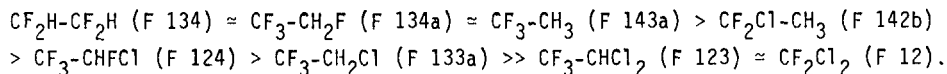
The reaction of exchange between chlorine and hydrogen atoms already described in compositions including one carbon CFCs is still active with the two carbon HCFCs proposed as substitutes



In addition a 'ClF' elimination is observed which leads to an olefinic compound.

A mechanism involving an intermediary complex between metal and HCFC is proposed in order to explain the formation of these two compounds.

The number of chlorine atoms and their repartition in the HCFC molecule are always the main cause of its instability. With N-methylpyrrolidone as the solvent, we observe the following order in decreasing stability :



The exchange reaction is observed also in other classes of chlorofluorinated compounds, ethers for instance.