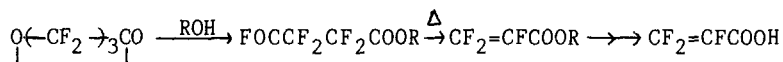


SYNTHESIS OF PERFLUOROACRYLIC ACID

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Despite the significance of perfluoroacrylic acid and its ester as polymerizable monomers, none of the previous routes to the title compound is satisfactory due to cumbersome steps and extremely low yields. In contrast to these earlier methods, we have now found a practical process for the synthesis of the title compound.



The process includes the formation of monoester monoacid fluoride of F-succinic acid from F-γ-lactone followed by the pyrolysis to eliminate carbonyl fluoride. The detail and the synthetic utility of the above reaction will be presented.