UNUSUAL TRANSFORMATION OF POLYFLUOROAROMATIC AMINOETHERS IN THE REACTION WITH ALKYLHALOGENIDES TO FORM PIPERAZINIUM SALTS

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An unusual transformation to piperazinium salts was found during the reaction between pentafluorophenoxy-ethylamino derivatives and alkylbromides.

$$2 \stackrel{\frown}{\mathbb{F}} - OCH_{2}CH_{2}N + 2RBr \stackrel{120-180^{\circ}C}{\longrightarrow} \stackrel{\frown}{\mathbb{N}} 2Br^{-} + 2 \stackrel{\frown}{\mathbb{F}} - OCH_{2}CH_{2}R$$

$$-N \stackrel{\frown}{} : -N \stackrel{C_{2}H_{5}}{\longrightarrow} ; -N \stackrel{\frown}{\longrightarrow} ; -N \stackrel{\frown}{\longrightarrow}$$

$$R : CH_{3}(CH_{2})_{8}CH_{2} ; C_{6}F_{5} - OCH_{2}CH_{2}$$

One way to obtain such a transformation could be the formation of an ammonium salt as a intermediate product, i.e.

This salt was prepared by the same reaction at milder temperature. It was destroyed by heating to higher temperature (about 180°C) under formation of a piperazinium salt.