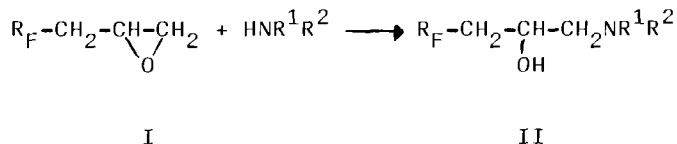


## COMPARATIVE STUDY OF N-CONTAINING FLUOROSURFACTANTS

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Highly fluorinated epoxides (I) react easily with secondary  
amines to 2-hydroxy-3-(perfluoroalkyl)-propylamines (II):



Further reactions of amines II with methyl iodide, propanesultone  
or hydrogen peroxide led to different types of surface active  
substances (cationics, sulfobetaines or amine oxides).

The comparative study was made with surfactants carrying either  
a branched [ $\text{R}_\text{F}=\text{CF}_3\text{CF}_2\text{CF}_2\text{C}(\text{CF}_3)_2$ ] or unbranched  
[ $\text{R}_\text{F}=\text{CF}_3(\text{CF}_2)_5$ ,  $\text{CF}_3(\text{CF}_2)_7$ ] perfluoroalkyl group. Their surface  
behaviour has been investigated.