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(54) Title: SULFUR CONTAINING FLUOROALKYL AMINES AND ISOCYANATES

(57) Abstract: The present invention provides fluoroalkyl amines represented by the formula $R_1-Q-S(O)_x-C(H)_1(CH_3)_1(CH_2)_{z+(1-1)}-NHR$ and fluoroalkyl isocyanates and isothiocyanates represented by the formula $RrQ-S(O)_x-C(H)_1(CH_3)_1(CH_2)_{z+(1-1)}-N=C=X1$, where x is 1 or 2; z is 0 or 1; I is 1 or 2 and j is 0 or 1, such that i+j=2; R is chosen from H or a C_1 to C_4 alkyl and X^1 is O or S. Additionally, the invention provides a method for making a sulfur-containing fluoroalkyl amine comprising the steps of (a) reacting a thiol represented by $R1-Q-SH$ with a /V-vinylamide represented by $H_2C=CH-(CH_2)_y-NR-C(O)-R$ to produce an amide intermediate represented by $RrQ-S-C(H)_1(CH_3)_1-(CH_2)_{z+(1-1)}-NR-C(O)-R$; (b) optionally reacting the amide intermediate with an oxidizing agent to produce a sulfur oxide intermediate represented by $RrQ-S(O)_x-C(H)_1(CH_3)_1-(CH_2)_{z+(1-1)}-NR-C(O)-R$ and (c) subjecting the amide intermediate or the sulfur oxide intermediate to deacylation to produce the sulfur-containing fluoroalkyl amine.