The synthesis of the NAS monomer, 4-fluoro-4′-(2-(4-benzyloxyphenoxy)ethoxy) benzophenone, was envisioned as a two-step process. Thus, the synthesis of 4-fluoro-4′-(2-(4-benzyloxyphenoxy)ethoxy) benzophenone was accomplished by the reaction of 4-fluoro-4′-hydroxybenzophenone and 1-(benzyloxy)-4-(2bromoethoxy) benzene. Hydrogenation of 4-fluoro-4′-(2-(4-benzyloxyphenoxy)ethoxy) benzophenone with 10% Pd/C was used to successfully remove the benzylic ether protective group, however, the reaction also reduced the benzophenone carbonyl. The synthesis of the EAS monomer, 4-(2-(4-phenoxyphenoxy)ethoxy)benzoic acid, was also a two-step process. The reaction of ethyl p-(2-hydroxyethoxy)benzoate and 4-phenoxyphenol gave ethyl 4-(2-(4 phenoxyphenoxy)ethoxy)benzoate in good yield. This ester could be easily hydrolyzed to 4-(2-(4-phenoxyphenoxy)ethoxy)benzoic acid. The polymerization of the EAS monomer, 4-(2-(4-phenoxyphenoxy)ethoxybenzoic acid, was carried out using Eaton’s Reagent (methanesulfonic acid, phosphorous pentoxide). The polymer exhibits low solubility in common solvents, had an average inherent viscosity of 0.62 dL/g, exhibited DSC transitions from 100°-120° and showed a substantial weight loss in TGA around 400°.