水性PU與含次乙亞胺之異三聚氰酸鹽和硼酯的架橋反應的研究

Two series of acylaziridinyl compounds were synthesized from the reactions of aziridine with boric ester and isocyanurate, respectively. Because the boric ester can be hydrolysis with the water of aqueous-based PU, and become the boric acid. Therefore, it will e the organic-inorganic hybrid. The curing agent with acylaziridinly of isocyanirate are helpful to the aqueous-based PU. The curing behaviors of these curing agents toward aqueous- based PU were evaluated by the measurements of gel content, contact angle, water- or alcohol- uptake, tensile strength and elongation of PU films. The Thermao-grimetric and dynamic methanical analysis.