

THERMAL STABILITY OF BISPHENOL A IN SUB-CRITICAL ETHANOL AND METHANOL

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The experiments on thermal stability of bisphenol A (BPA) with or without sodium hydroxide in sub-critical ethanol and methanol were studied. The influence of experimental conditions such as temperature (443~523 K), pressure (2.1~9.4 MPa), reaction time (15 min), and ethanol/methanol to BPA ratio (8.0), were investigated. GC-MS and GC were used to analyze the products. It was found that the thermal stability of BPA in sub-critical ethanol was better than that in sub-critical methanol at the same conditions. The addition of NaOH, which played the role as catalyst of PC depolymerization, would decrease the stability of BPA.

Keywords: bisphenol A; sub-critical; thermal stability; methanol; ethanol