

친수성 고분자 박막의 유전 특성

최승렬, 임경진, 김준영

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Dielectric Property of Hydrophilic Copolymer Thin Films

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Abstract: In this study, HEMA-based hydrophilic copolymers were synthesized and dielectric constant (K) of the polymer thin films were investigated by change hydroxyl group (-OH) ratio in the polymer chain. The different hydroxyl group ratios were characterized by FT-IR and its thin films were obtained by spin coating. As a result, due to the moisture absorption of the hydrophilic thin film, the dielectric constant has been increased as was expected. The highest dielectric constant (K=4.19, @1MHz) was observed at 40% hydroxyl group ratio among the several polymers.

Key Words: Dielectric constant, Hydrophilic polymer, Hydroxyl group, Polymer insulator