Antibacterial properties of PP/organic-MMT composites via a melt blending

윤두수, 이응재, 권중근, 민경두[1,*], 최유성[1], 방문수[2]
조선이공대학; [1]럭키산업; [2]공주대학교

PP /montmorillonite-aminopropyl triethoxy silane(APTES) composites were obtained by melt blending. Organic-montmorillonite(MMT) with antibacterial properties was prepared from dried montmorillonite was mixed with a solution of 3-amino propyl triethoxy silane in acetone and vigorously stirred. It was filtered, washed several times with acetone and later dried. The effect of organic-MMT on the mechanical properties and thermal stability of the composites was investigated. The antibacterial activity of the PP/organic MMT was evaluated by the smear test and revealed activity against E. coli and S. aureus