

Polyester 용 방염제의 합성과 그의 방염성

최태수 . 고석원

서울대학교 공과대학 섬유공학과

Tris(4-bromophenyl) phosphate(BPP), Bis(4-bromophenyl) Sodium phosphate(BSP) and 4-bromophenyl disodium phosphate (BDP) were made by interfacial reaction.

Flammability of treated PET fabrics was investigated through LOI measurement and times of flame contact, and physical property such as stiffness was also investigated.

LOI was increased with the content of BPP, BSP and BDP in fabrics, and satisfactory flame retardancy was obtained at a P content of only 0.3-0.5% and a Br content 2-3% based on the weight of the fabrics.

When P content in fabrics was more than 0.3-0.5%, flame retardancy was also sustained after 5 laundering cycles.

Fabrics treated are little change in handle.

The magnitude of flame retardancy was BDP>BSP>BPP.