

Article

The Synergistic Effect of Ionic Liquid-Modified Expandable Graphite and Intumescent Flame-Retardant on Flame-Retardant Rigid Polyurethane Foams

Yongjun Chen ^{1,*}, Yuanfang Luo ¹, Xiaohui Guo ¹, Lijuan Chen ^{2,*} and Demin Jia ¹

¹ College of Materials Science and Engineering, Key Lab of Guangdong Province for High Property and Functional Macromolecular Materials, South China University of Technology, Guangzhou 510641, China; psyfluo@scut.edu.cn (Y.L.); msgxh@mail.scut.edu.cn (X.G.); psdmjia@scut.edu.cn (D.J.)

² Center for Advanced Analytical Science, c/o School of Chemistry and Chemical Engineering, Guangzhou University, Guangzhou 510006, China

* Correspondence: yjchen@scut.edu.cn (Y.C.); gdchenlj@gzhu.edu.cn (L.C.); Tel.: +86-020-87114857

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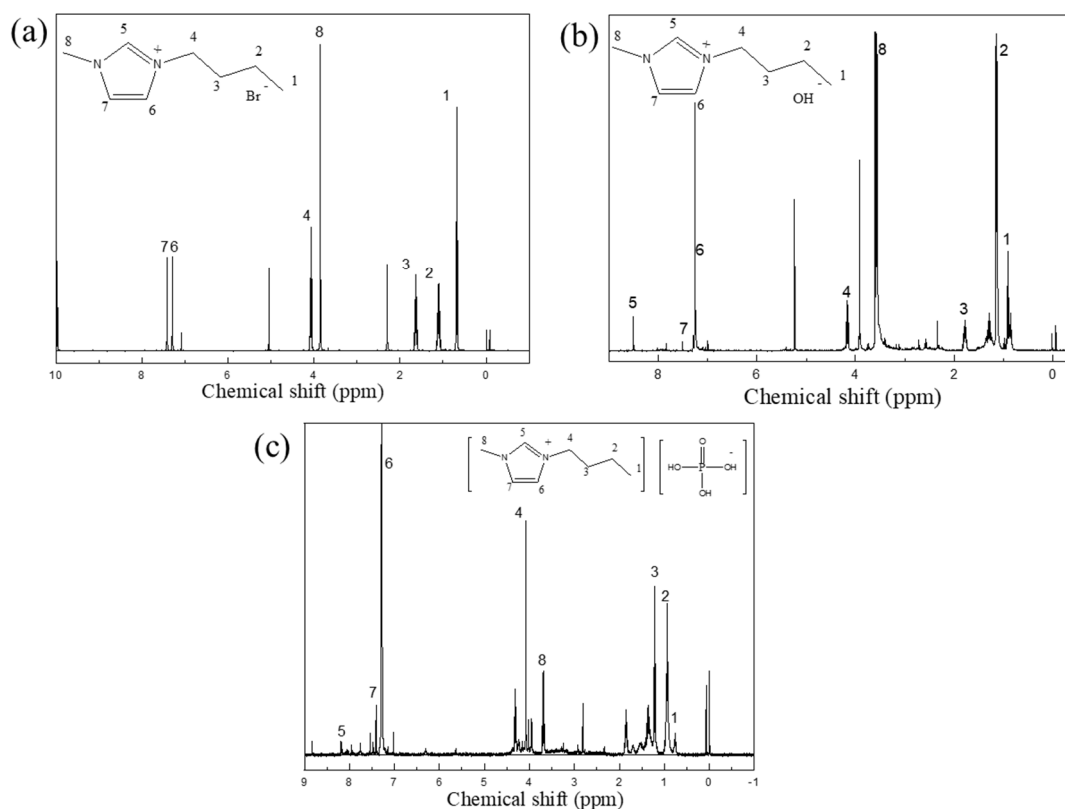


Figure S1. ¹H-NMR spectra of (a) bromide-1-butyl-3-methyl imidazole, (b) hydroxide-1-butyl-3-methyl imidazole and (c) butyl-3-methyl-imidazole phosphate. (0.871(1H); 1.204 (2H); 1.723 (3H); 4.094 (4H); 8.633 (5H); 7.349 (6H); 7.398 (7H); 3.812 (8H)).

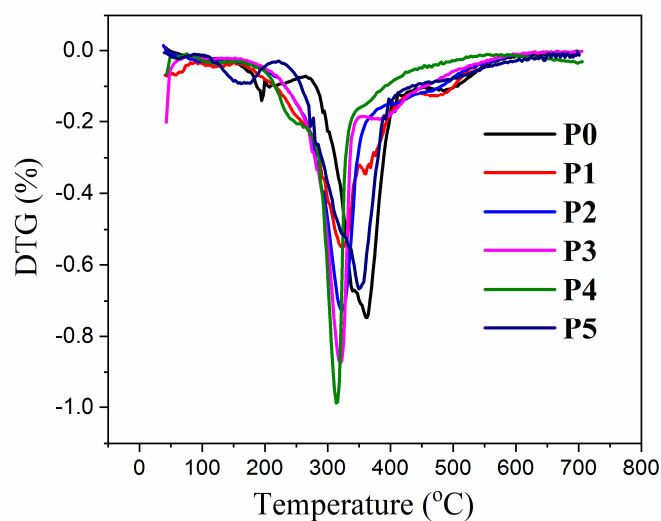


Figure S2. DTG curves of RPUF modified with different content of IL-EG/DPES.

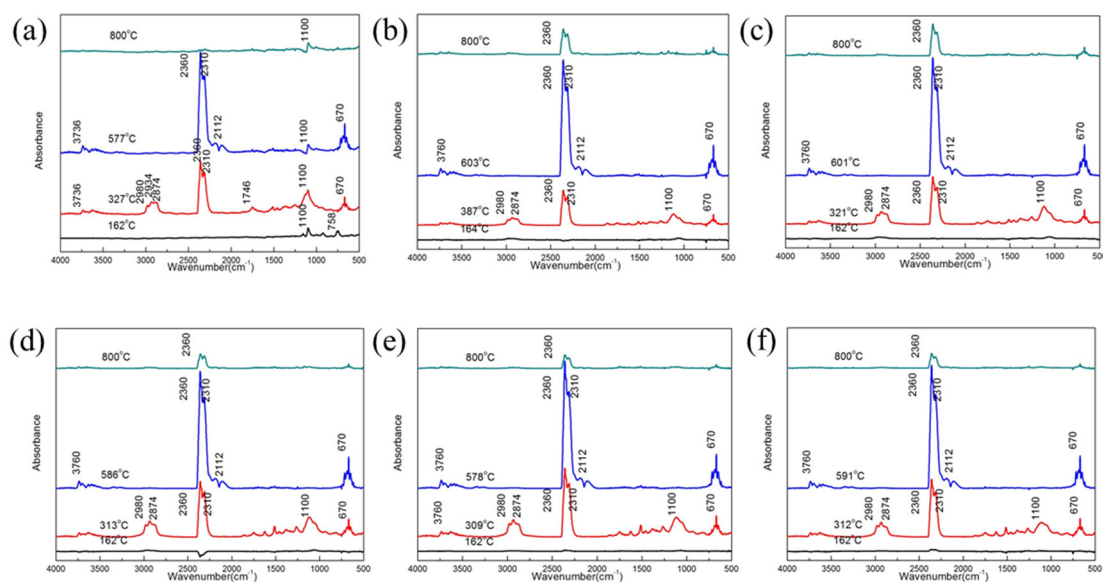


Figure S3. FTIR analysis of gas escape for RPUF and IL-EG/DPES flame-retardant RPUF at the point of maximum weight loss rate: (a) P0, (b) P1, (c) P2, (d) P3, (e) P4 and (f) P5.

