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Journal Name:	International Research Journal of Pure and Applied Chemistry
Manuscript Number:	2014_IRJPAC_12505
Title of the Manuscript:	The Effect of <i>Sterculia setigera</i> Bark Extract on the Flammability of Flexible Polyurethane Foam
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	In the reviewed article, the authors attempt to tackle an interesting issue of synthesizing a compound which could be used for obtaining flexible polyurethane foams in order to decrease their flammability. The article contains a research on preparing a compound from an extract of African plant – <i>Sterculia setigera</i> – that would decrease the foam flammability. The new compound (acting as antipyrene) can definitely be a subject of interest in this industry, especially if it could be produced using available and not expensive resources. Remarks to the reviewed article: 1. The research methodology was not correctly described. While using multiple research methods, one should state the standards in accordance to which they were used. 2. The manufacturers and short characteristics should be given for the materials used during the conducted research. 3. Using a bark extract as the agent for reducing flammability is an innovation. However, if this compound reduces foam flammability (which was shown in the research), it should be thoroughly characterized (properties and chemical composition). Please describe the way the	1 We cannot find the standard according to which the methodology and the analysis were done but the literature cited were obtained from various journals both national and international of repute as indicated in the literature. The search for the standard took us this long and we cannot still find one although the methods are similar to some international standards like ASTM D3659-86, ASTM F501-88, ARTICLE 11, NFPA 701 FIELD TEST, METHOD 5902 FTMS191A etc but despite the statements above we still feel the methodology is reliable in determining the parameters, that is, the burning characteristics of the obtained foams 2 Done and shown in a highlighted manner in the materials section 3 The elemental analysis was not done because it is a part of my Msc. Thesis and GC-MS was done on only <i>Acacia senegal</i> leaf extract. We also feel that the flammability characteristic of the extract can be ascertained even without the elemental analysis. Furthermore for it to be used as a flame retardant other parameters will have to be considered before its final selection, so our research is a preliminary one in the search for



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	implemented bark extract increases flame resistance in flexible polyurethane foams. Why the combustion time was prolonged and why the flame spread speed decreased in the modified samples? 4. Literature references should be described according to general guidelines for authors. 5. Starting from introduction with section 1. subsections should be numbered (for example 2.1 (then 2.1.1, 2.1.2, 2.2, etc.), up to three levels (see: general guidelines for authors). If the authors would have done some major corrections to the article, it could be published in the International Research Journal of Pure and Applied Chemistry.	the alternative 4 RE-checked 5 Corrected
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		