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PU Foam Derived from Renewable Sources: Perspective on Properties En-

hancement: An Overview

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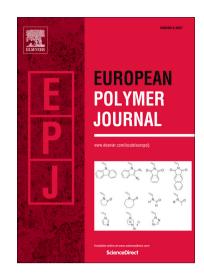
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## **ACCEPTED MANUSCRIPT**

### PU Foam Derived from Renewable Sources: Perspective on Properties

#### **Enhancement: An Overview**

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#### **ABSTRACT**

Polymeric foams derived from renewable sources are a requirement of the modern world due to increasing concern about the environment and various issues related to petroleum based foams. Much research has been conducted recently to produce foams using renewable sources; however, low mechanical strength, high flammability and low thermal stability are a matter of concern when using these foams on a commercial scale. Various approaches may be used to overcome these problems, including the modification of raw material or the incorporation of property-enhancing fillers, with or without surface treatment. In this overview, various methods that may be used to enhance mechanical, thermal and flame retardant properties of renewable source-based and other environmentally benign polyurethane foams are discussed.

**Keywords:** Polyurethane foam, Environment friendly, Non-isocyanate polyurethane, Mechanical properties, Anti flammability.

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