BIOLOGICALLY DEGRADABLE LEATHER: A SELECTIVE COMBINATION TANNING SYSTEM

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Abstract

Disposal of leather products after the usage is become a vial issue in present ecological scenario. Life cycle assessment of leather products is gaining importance in the global market. Leather is made from hides/skins, which are easy biodegradable and become poor biodegradable after tanning. Generally, chromium and vegetable tannins are employed for tanning the hides/skins. Biodegradability of leather is primarily based on the tanning process adopted. In this study an attempt has been made to assess the biodegradability of chrome and vegetable tanned leathers. A selective combination tanning system has been designed to achieve higher biodegradation rate. Leathers obtained from selective combination tanning system have been analyzed for physical and organoleptic properties. Biodegradability study showed that the leather from selective combination tanning system is highly biodegradable than chrome and vegetable tanned leathers.