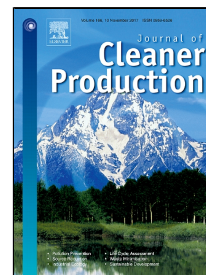


# Accepted Manuscript

Complete replacement of carbon black filler in rubber sole with CaO embedded activated carbon derived from tannery solid waste



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**Highlights**

- Tannery limed fleshing waste pyrolyzed and converted into activated carbon for filler application.
- Presence of CaO in activated carbon conformed by XRD and SEM analysis.
- Carcinogenic filler Carbon black was replaced by prepared CaO embedded activated carbon (CaO-AC).
- CaO-AC gives better vulcanized rubber compared by involving ionic crosslink.
- Physical properties of both carbon black and CaO-AC fillers gives required properties of sole

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