Buffing Dust waste - A Useful Source for Making Leather Like Sheets

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Abstract: India is one of the major leather producers and nearly 0.75 million tons of raw hides/skins are processed annually. Conversion of 1 ton of rawhide/skin into leather generates nearly 200 – 300 Kgs. of solid waste and rest of the material is converted into leather. Some of the solid wastes such as raw hide/skin trimmings, fleshings, chrome shavings, leather trimmings find uses in other industries, however, waste like buffing dust do not find any use. As they are fine particles and also contain chromium, current practice of dumping in vacant site causes severe health and environmental problems. In the present work, an attempt has been made to make leather like sheets using buffing dust, textile material and different polymer solutions. A detailed study has been made on different textile material by coating polymer emulsion and buffing dust for preparing leather like sheet. The textile coated with polymer and buffing dust resembles leather and tested for different strength properties. Different articles such as valets, coin pouches, and handbags have been made using this material. This study shows that buffing dust a problematic waste in leather making can be used for making useful lining like leather and several articles can be made using this material. This leather like sheet will not only solve the problem of solid waste but also will provide additional wealth.

Key words: Buffing dust; Leather like sheets; Solid waste