DETERMINATION OF THE BEST OXIDATION TIME OF CHAMOIS LEATHER PROCESS USING RUBBER SEED OIL WITH OXIDIZING AGENT OF SODIUM HYPOCHLORITE

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ABSTRACT

Chamois leather is a well known product, as it has specific uses for gasoline filtration, cleaning and drying of optical equipment, spectacles, mirror and vehicles. It can be produced by using rubber seed oil and oxidizing agent of sodium hypochlorite. The best oxidation time condition for tanning need to be applied in order to obtain good quality leather. The objectives of the research was to determine the best oxidation time condition for the tanning process. The experiment was carried out by tanning of goat pickle pelts for 4, 6, 8 hours of oxidation times inside the rotary drum and 1, 2, 3 days of oxidation times at a toggle dryer. This study shows that the chemical, physical and organoleptic properties of the leather met the quality requirements for the chamois leather. The best oxidation times for the process were 4 hours in the rotary drum and hang at toggle for 3 days. The chemical properties of the leathers were pH of 7.48, ash content of 1.99%, and oil content of 4.51%. The physical properties were thickness of 0.7 mm, tensile strength of 30.20 N/mm², elongation at break 178.09%, tear strength of 75.105 N/mm, and water absorption of 315.655% (2 hours) and 346.49% (24 hours). The organoleptic properties of the leathers, i.e. softness, colour and odour, were considered good to excellent.

Keywords: chamois leather, oxidation time, rotary drum, toggle, sodium hypochlorite