

**PENGARUH SUHU YANG BERBEDA PADA TAHAP
PENYAMAKAN KROM TERHADAP
KUALITAS FISIK KULIT DOMBA**

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INTISARI

Proses penyamakan kulit dipengaruhi oleh suhu selama proses penyamakan berlangsung, namun penelitian tentang hal tersebut masih jarang dilakukan. Penelitian ini bertujuan untuk mengetahui kualitas fisik kulit domba yang disamak krom dengan perlakuan perbedaan suhu. Penelitian menggunakan bahan kulit domba piket yang diperoleh dari industri kulit lokal dan diberikan tiga perlakuan suhu dengan tiga ulangan. Perlakuan perbedaan tingkat suhu dalam tahap *tanning* menggunakan variasi suhu 30°C, 45°C, dan 60°C. Parameter penelitian yang diuji adalah kualitas fisik meliputi uji suhu kerut, kelemasan, kekuatan tarik, kemuluran, dan kekuatan sobek. Data yang diperoleh dianalisis menggunakan analisis variansi pola searah, kemudian dilanjutkan dengan *Duncan's New Multiple Range Test (DNMRT)*. Hasil penelitian menunjukkan bahwa pemberian perlakuan suhu pada proses *tanning* berpengaruh signifikan terhadap kualitas fisik kulit domba samak krom yaitu parameter suhu kerut dan kelemasan. Perlakuan suhu 45°C pada proses *tanning* memberikan karakteristik kualitas fisik kulit domba samak krom yang paling baik dan mencapai standar SNI, dengan data suhu kerut ($120,27 \pm 2,67^\circ\text{C}$), kelemasan ($7,93 \pm 0,24$ mm), kekuatan tarik ($1098,31 \pm 489,25$ N/cm²), kemuluran ($68,86 \pm 3,20$ %), dan kekuatan sobek ($134,86 \pm 16,79$ N/cm).

Kata kunci: Kulit domba, Suhu penyamakan, Kualitas fisik kulit.

THE EFFECT OF DIFFERENT TEMPERATURES AT CHROME TANNING STAGE ON PHYSICAL QUALITY OF SHEEPSKIN

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ABSTRACT

The *tanning* process is affected by the temperature during the *tanning* process, but it was very little information about this research topic. This study aims to determine the physical quality of chrome-tanned sheepskin with temperature various treatments. The study used pickle sheepskin which were obtained from the local market and were given three temperature treatments with three replicates. The treatment of different temperature levels in the tanning stage were 30°C, 45°C, and 60°C. The research parameters tested were physical quality including shrinkage temperature, softness, tensile strength, elongation at break, and tear strength. The data obtained was analyzed using a One Way of Complete Random Design, if there is a difference, followed by Duncan's New Multiple Range Test (DNMRT). The results of the study showed that the application of temperature treatment in the tanning process had a significant effect on the physical quality of the chrome sheepskin, namely the parameters of temperature, shrinkage temperature and softness. The 45°C temperature treatment in the tanning process resulted the best physical quality characteristics of chrome-tanned sheepskin and reaches SNI standards, with data on shrinkage temperature ($120.27 \pm 2.67^\circ\text{C}$), softness (7.93 ± 0.24 mm), tensile strength (1098.31 ± 489.25 N/cm²), elongation at break (68.86 ± 3.20 %), and tear strength (134.86 ± 16.79 N/cm).

Keyword: Sheepskin, Tanning temperature, Physical quality of leather.