

Archaeological Preservation Research Laboratory Report 10:

Conservation Research Laboratory (CRL) Leather Dressing

C. Wayne Smith

D. L. Hamilton

Conservation Research Laboratory/Archaeological Preservation Research
Laboratory

Texas A&M University

INGREDIENTS:

Polyethylene Glycol (PEG) 4000

PR-12 Silicone Oil

Pigment (optional)

Preparation:

1. 2 parts PEG 4000 to 3 parts PR-12 silicone oil
2. Combine these ingredients in a glass beaker and warm them in an oven heated to 110 degrees Fahrenheit. Mixing will become easier as the mixture warms. ****do not boil the mixture**
3. Let the mixture cool slowly. Stir periodically to ensure smoothness.
4. Apply a thin even coat to the surface of the leather and buff with a soft cloth.
 - For very dry stiff leather, the process can be repeated several times.
 - If the leather is badly cracked, allow the dressing to soak into the surface before buffing.
5. Periodic applications of this dressing appear to soften stiff dried leather, acting as a humectant. Always off excess dressing before crating the leather artifact.
6. Add pigments such as bone black, graphite or oxides such as iron oxide or titanium dioxide as necessary.

-Our experiments have indicated that pigment additives should not exceed 3% of the total volume of the solution.

-Acrylic-based pigments can cause thickening or lumpiness of the leather dressing: if these must be used to obtain a desired color, make a test batch of the dressing before treating the artifact to ensure that there is no chemical reaction between the coloration and the basic dressing.

7. Store the mixture in a tightly sealed jar. The resultant mixtures form a moderately stiff paste that has a relatively long shelf life. Humidity may affect the consistency of the dressing over a long period of time.

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