



HIGH SCHOOL THEATRE FESTIVAL

FIRE RETARDANT FINISHES FOR SCENERY AND COSTUMES

SCENERY

All scenic elements should be treated with a flame retardant mixture. Materials may be bought already treated, the production crew may treat them, or a professional flame proofing company may treat them after the scenery is finished. Most fabrics used in the theatre can be purchased with a flame retardant already introduced.

If you intend to do your own flame proofing, the most popular solution requires that you dissolve:

- 1 lb. sal Ammoniac and
- 1 lb. Borax in 3 qts. water

Extreme care should be taken with this treatment, as these compounds are irritating to skin and eyes. Other formulas are available in the National Fire Code and in many stagecraft textbooks, such as Willard F. Bellman's Scenography and Stage Technology.

Self-applied treatments are normally sprayed or painted on, or mixed with a paint solution. You should always prepare small treated samples first and test for fire retardancy.

COSTUMES

Most dry cleaners can apply a flame retardant finish to garments. However, you can accomplish the same results yourself with most fibers* at much less expense.

Dissolve 3 ounces boric acid and 7 ounces borax (both items can be purchase at a drugstore) in 2 qts of warm water. Completely soak the fabric in this solution. When dry, the material will not support flames. This solution must be reapplied after each washing or dry cleaning. This finish may dull high luster fabrics. It is also likely to stiffen very light fabrics.

*WARNING: Furs and fabrics harmed by water should be flamed-proofed by a professional.

For additional information, consult:

The Costumer's Handbook
by Rosemary Ingham and Elizabeth Covey
Prentice-Hall, Inc.

Or contact:

U.S. Department of Agriculture