

BLEEDING DYES

COLORFASTNESS

One of the most common problems in interior textiles is colorfastness. Colorfastness concerns can be associated with sunlight, atmospheric pollutants, abrasion, waterborne substances, etc. Other than sunlight, the primary category of colorfastness problems seen in our industry is “bleeding” (also called “wet crocking”). Bleeding is “the liquid-induced transfer of a colorant from the surface of a colored yarn or fabric to another surface or, more commonly, to an adjacent area of the same fabric”.

HOW DOES IT OCCUR?

When fabrics are dyed, there are many different classes of dyes and different methods for “fixing” them to the various fibers, yarns or fabrics. If a dye is improperly fixed, or if there is excess dye present, colorfastness problems can become evident when liquids are introduced. As would be expected, darker shades are more prone to bleeding because it takes more dye to achieve these shades and these greater quantities of dye are harder to control.

The fabric on this page was taken from a sofa, which exhibited bleeding after an accidental spill. When the fabric was evaluated in our lab, it showed poor colorfastness to water. Further investigation determined that it was not a general problem with this fabric, but a problem with one particular dye lot. Note that we have created the bleeding in one corner of the sample by wetting the fabric with water. This fabric at first looks like it

might be a printed pattern, but it is actually a jacquard.



JACQUARDS

Any time there are different colors adjacent to one another in the same fabric, there are potential problems. Jacquard fabrics, with designs woven of different colored yarns, are particularly suspect because often the colored yarns exposed on the surface continue along the underside of the fabric. On light-colored fabrics with darker accent yarns, this should trigger a red flag.

TIMING IS IMPORTANT

One of the most interesting characteristics of dye bleeding is that it can happen almost immediately in some instances, while other fabrics will exhibit bleeding which takes up to 20 minutes or more to develop (we call these “slow bleeders”). In addition to time, high temperatures and alkaline pH detergents can aggravate bleeding situations.

HOW DO YOU RECOGNIZE A FABRIC WITH THIS PROBLEM?

There is no way to tell without doing some preliminary testing. The first rule of cleaning, whether it be minor spot removal or major overall cleaning, is to pre-test. Find an inconspicuous area of the fabric and apply the cleaning solution(s) that will be used on the fabric, then wait for the area to dry.

A common mistake in this type of testing is to use a hair dryer or fan to speed-dry the test area, but then to let the actual cleaned fabric dry naturally. Test conditions must always be as similar as possible to subsequent cleaning conditions. If the test is done under more favorable circumstances, problems such as bleeding dyes may not show up until the actual cleaning process.

As a general rule, high-pH cleaners such as ProKleen (pH 10) should be used with great caution on fabrics where bleeding might be indicated.

Likewise, it is always a good idea to dry fabrics as quickly as possible. This can help minimize not only bleeding, but also shrinkage and other problems.

COLORFASTNESS STANDARDS

Surprisingly, there are no mandatory standards for colorfastness in the fabric industry. The American Furniture Manufacturers' Association, through its Joint Industry Fabric Standards Committee, has published a set of voluntary standards that are widely followed within the industry. Included in this reference are standards for colorfastness to both water and solvents.

CAN A STAIN REPELLENT TREATMENT CURE THE PROBLEM?

Non-aqueous fluorochemical treatments that offer added repellency are perfectly safe for fabrics, which tend to have bleeding problems. They may even help slow the development of dye bleeding by creating a less absorbent fabric. It is important to note, however, that these treatments are not a "cure" for colorfastness problems.

ALWAYS TEST CHEMICALS AND/OR PROCEDURES FIRST ON AN INCONSPICUOUS AREA OF THE FABRIC.