

TECHNICAL BULLETIN

VINYL STAINING - DUE TO MOLD

There has been a lot of internet Blog discussion regarding vinyl staining in boat seating with various statements blaming just about everything conceivable. If you Google "what causes vinyl seats to stain" many of these will pop up along with other very technical reports. You'll soon see the conditions of staining vary between Mold growth and Dehydrochlorination. This bulletin will help explain the mold condition.

Mold is an environmental issue where trapped moisture serves as the catalyst for mold spores to begin growing and thereby stain vinyl and other surfaces. (Stain colors vary; pink, red, black, brown, yellow) This can happen in two manners - **On the Surface** or **Under the Surface**.



On the surface is when the mold spores inhabit the exterior surfaces of vinyl and begin to grow when the moisture/organic material/temperature/light conditions are conducive. It is usually fairly evenly spread. Caught early and depending on the quality of the vinyl, this growth can be cleaned with various cleaners and also many times corrected by exposure to UV light energy. (Similar to having mold on the surface of house siding; you'll notice it grows on the shaded side of the house and not where the sun exposure is significant)





Under the surface is when mold spores inhabit the foam that is under or laminated to the vinyl. If the foam does not have any anti-microbial characteristics then the mold will grow and stain under the same moisture/organic material/temperature/light conditions. This staining is most often not correctable as it is the result of the mold waste excretion staining through the backside of the vinyl. (Usually round impregnated blotches of various size & colors; pink, red, yellow, etc) It is important to note that even foams that are antimicrobial treated lose their resistance over time.



Our next bulletin will address Dehydrochlorination which is a much more complex condition.



Summary

- Covering a boat creates a dark environment but that alone won't cause mold to grow. It takes moisture, organic material and
 proper temperature.
- Important inhibitors help quite a bit and are related to the quality of the vinyl where some have top coatings which help resist "On the Surface" growth and anti-microbial foams to resist "Under the Surface" growth.
- As referenced in the Mold & Mildew Cause and Prevention Bulletin both of these conditions can be managed successfully by proper boat preparation before storage.



Once the boat is ready to store the best practices are:

- MOST IMPORTANT: Clean and dry the boat thoroughly!
- Place a "Boat Dry" set of desiccant bags throughout the boat
- Put our Outer Armor™ cover on, tightly ratcheted (seal will be created at the rub-rail)
- Block the **VacUHold**® Vents to prevent outside air from getting in. This will lower the possibility of moisture condensation needed for mold or mildew growth. (Caution do not block the vents when towing)

Commercial Sewing Inc

65 Grant St • Torrington, CT 06790 • Ph: 860.482.5509 • Fax: 860.482.7964

CS-09



