

Yellowing Carpets?

Editors Note: The following information is re-printed courtesy of the Association of Cleaning Technicians (ACT). It originally appeared in the May June issue of the ACT NEWSLETTER.

Recently some have experienced problems with certain light colored carpets turning yellow after cleaning. Problems with yellowing are not new. Most fibers yellow with aging and wool and silk yellow with sunlight. Heat causes wool, cotton and some nylons to yellow, and chlorine bleach will cause most fibers to yellow. And we have all seen browning occur on carpets. But our recent troubles have been different. New carpets receiving their first cleaning are turning yellow. Even carpets which have not been cleaned, only dampened have turned bright yellow. Most of the cases that we have heard of are on the 5th generation nylons or polyester carpets. This problem has occurred with several different cleaning systems and chemicals.

Naturally when you have just completed the cleaning of a carpet and it turns yellow, the homeowner, retailer, installer and anyone else who is involved says, "it must be the cleaners fault". What is surprising is that so many cleaners are completely willing to take the blame for this. Sure, they have cleaned a thousand other carpets in the same way, but it must be the fault of cleaning; "Look what happened!" Don't let yourself become the victim of circumstantial evidence.

This problem is caused by Butylated Hydroxy Toluene, also known as BHT. BHT is mixed with polypropylene (olefin) as an antioxidant to prevent brittleness in the fibers. Most primary and secondary backings are made of polypropylene. The trouble is that BHT reacts with oxygen and nitrogen oxides (burnt gas fumes) in the air and forms bright yellow by-products.

Carpets with absorbent fibers or secondary backing, retain much of these yellow by-products without notice, but with non absorbent stain resistant fibers like polyester, olefin and advanced generation nylons (4th, 5th, and 6th) it has nowhere to go. Thus, when the carpet becomes wet, yellow stains migrate to the surface by means of wicking action.

This problem is a carpet defect, not a cleaning defect. Backing manufacturers and carpet mills are aware of this problem. Non-yellowing antioxidants are available, and mill treatments are available which reduce the yellowing process, but both cost more to use. Therefore, they are not always used. There is no way for you to know which carpets have a potential for this problem. But, if you do experience trouble with this type of yellowing, don't let yourself become a victim of circumstances and BHT.