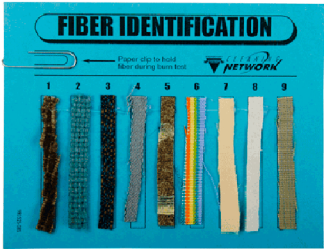


UNDERSTANDING THE BURN TEST

Burn testing is the best way to identify the fiber content of a carpet or fabric.

Equipment Needed: Use a butane lighter, an ashtray or any fireproof container, a pair of scissors, and a paper clip or tweezers to hold the burning piece of fabric.



Procedure: Cut a clipping of carpet or fabric (a couple of tufts will normally be sufficient). Be sure to take it from an inconspicuous place. Hold the fiber over the ashtray with the tweezers and light it with the butane lighter. Observe its characteristics as it burns. The following chart gives you the characteristics of the different fibers. It also contains chemical and physical tests that will help you identify different fibers.

Short Cut To Fiber Identification: A common misconception is that the burn test takes a long time to perform. This is not the case. The best use of the burn test is to identify a category of fiber rather than the fiber itself. The categories of fibers are:

- Natural Fibers - Those occurring in nature.
- Protein - Those that came from animals such as wool and silk.
- Cellulosic - Those that come from plants, such as cotton, linen and jute.
- Synthetic Fibers - Man Made. (Nylon, Polyester, Acrylic, Olefin)
- Synthetic/Natural - We have two fibers in this category: Rayon & Acetate

Rayon and acetate fibers are manufactured by taking nat-

| FIBER TYPE | FLAME (COLOR ACTION SMOKE) | ODOR | ASH (SHAPE COLOR HARDNESS) | CHEMICAL I.D. |
|-------------------------|---|--------------------------------|--|---|
| WOOL | Orange Sputters None | Burning hair | Irregular Black, crumbles easily to a fine powder | Choline bleach or Sodium Hydroxide (lye). Strong acids will not dissolve |
| RAYON | Orange | Burning paper | No ash, no bead, slow burning ember, rapid burning flame | Acetone & strong alkalines will not dissolve. Sulfuric acid will dissolve |
| COTTON | Slow burning ember, flame yellow or amber | Burning paper | Gray fluffy ash | Strong acids will dissolve, Stronger when wet, usually softer with alkalines (mild) |
| ACETATE | Sizzling | Acetic acid | Black bead | Acetone and acetic acid will dissolve. Not effected by alkalines |
| ACRYLIC | White-Orange Sputters Black | Harsh, acid charred meat | Irregular Black Hard Crust | Nothing effects it! |
| NYLON | Blue base and orange tip Even None | Celery or sealing wax | Round and beadlike Gray-brown to black hard | Dissolves in Formic acid |
| POLYPROPYLENE OLEFIN | Blue base and orange tip Even None | Asphalt or burning paraffin | Rounded to beadlike Light gray to brown Hard | Dissolves in dehydroantholene |
| POLYESTER | Orange Sputters Black | Sweet, over ripe fruit | Rounded Shiny black Hard | |

ural fibers, dissolving them, then by reconstitution, forming them into a fiber again. When you burn these two fibers they will act like and should be cleaned the same as a cellulosic fiber.

The short cut is this. Once you have determined the category of the fiber, all of the fibers within the category are cleaned with the same method. You will find the cleaning methods for carpet and upholstery in this catalog along with the appropriate chemicals.

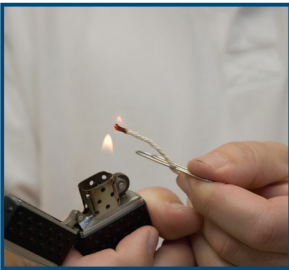
Step 1 - Burn the fiber and notice the ash. If it is a powdery ash that crumbles as you rub it between your fingers then it is a natural fiber. If the ash melts and forms a hardened bead then it is synthetic.

Step 2 - Notice the odor. If the ash indicates that it is a natural fiber, you need to know if it is Protein or Cellulosic. The protein fibers smell like burning hair and the cellulosic smell like burning paper or camp fire.

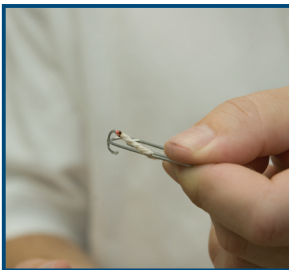
This simple test takes about one minute. It is well worth doing to make yourself a better cleaner and to instill customer confidence.



*Burning synthetic fibers.
The fibers begin to bead.*



*Burning natural fibers. The
fibers turn to ash.*



*The natural fibers have
turned to ash.*



*Notice the difference in
smell?*