education

The Fibres Unknown Test

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Unique™ Patterns

Many times in a fabric store you will find fabrics that have their fabric content listed as "fibers unknown". These pieces are often reasonably priced because the store cannot be sure of the content. Like the store, you can't be 100% sure of the fabric content, but using a burn test you can get a very good indication of the fibers that are present.

WARNING: Please use caution when performing this test

A few threads of the fabric are sufficient. Note the look and the odor as the fabric burns as well as the ash that is left behind. Ask for a small sample to take home and test. Burn your fabric over a flame resistant surface and be careful. Use a pair of tweezers to hold the sample and don't try to look too closely at the flame you may singe your eyebrows. Approach the fabric slowly with the flame and observe how the fabric reacts. Also, observe how the fabric burns, quickly or slowly. Note the odor. Finally, remember to have a look at the ash or residue. This will not tell you percentages of the fibers involved but it will give you an idea of the basic makeup. When fibers are blended together there can be other chemical reactions that occur. Finishing products applied to the surface of the fabric may also affect your results. If you think the fabric is a blend, burn the wrap and filling threads separately. Use the following information to help determine some of the more common fibers.

COTTON: Ignites on contact with flame; burns quickly and leaves an afterglow when extinguished; smells like burned paper; light feathery ash.

SILK: Curls away from the flame; burns slowly usually self-extinguishing; smells like burned hair; crushable black bead residue.

WOOL: Curls away from flame; burns slowly and may self-extinguish; smells like burned hair; brittle black bead.

LINEN: Ignites on contact with flame; burns quickly but slower than cotton; smells like burned rope; ash maintains the shape of the swatch.

RAYON: Appears to burn without flame and burns slowly; smells like burned rope; ash maintains the shape of the swatch.

POLYESTER: Shrinks from the flame; melts and fuses; emits a black smoke; sometimes self-extinguishing; smells sweet and chemical; leaves a hard black or brown bead.

NYLON: Shrinks from the flame; melts and fuses; smells like celery; leaves a hard gray or tan bead.

ACETATE & TRIACETATE: Fuses and melts; burns quickly; smells like hot vinegar; leaves an irregular shape, hard brittle charcoal. If you suspect the fabric might be acetate, try a drop of nail polish remover (acetone), which will dissolve acetate.

ACRYLIC: Burns rapidly with a hot flame; sputters and smokes; smells like hot vinegar; leaves a crisp, black mass.

