

## **PROFESSIONAL WETCLEANING PROCEDURES FOR WOOL KNIT FABRICS (82)**

**There is a lot of misinformation on wetcleaning wool knit fabrics. You first must understand the characteristics of the wool fiber. An understanding gives you better insight on what you can do to prevent shrinkage, matting and felting.**

### **PROPERTIES**

**Wool is a protein fiber obtained from sheep. Merino is a breed of sheep that is said to produce the finest wool. Where the wool grows on the animal also determines the grade and quality of the wool.**

### **SHRINKAGE**

**The wool yarn used in knit fabrics is loosely twisted and contains short staple fibers. The wool fiber has scales and shrinkage occurs because the yarn draws up. The structure of the wool yarn could best be compared with collapsible telescope. As the telescope can reduce in size so can the wool yarns. Manufacturers usually do not pre-shrink wool fabrics because the treatment can reduce the softness and feel of the fabric.**

### **FACTORS WHICH PRODUCE SHRINKAGE**

**Wool knit fabrics can shrink from a number of factors. The more factors present the more shrinkage that can occur. If the shrinkage is slight it is called relaxation shrinkage. If the shrinkage is severe it is called felting.**

- (1) Water**
- (2) Mechanical Action**
- (3) Heat**
- (4) Alkali**
- (5) Change in Temperature**

**An example of how shrinkage might occur on wool knits from the aforementioned factors is that by simply soaking a wool in water might cause slight shrinkage. If I then add heat and mechanical action the shrinkage increase drastically and is more severe. It is therefore necessary when wetcleaning wools that these factors be carefully controlled.**

### **THE THEORY OF WETCLEANING WOOL**

**The washing machine can not be used on any cycle except soaking. Even a gentle washing cycle will produce enough mechanical action to cause shrinkage.**

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## **PRODUCTS FOR WETCLEANING**

**Mild detergent**

**White distilled vinegar**

**Liquid softening agent**

**It is necessary to wetclean wool using a mild detergent such as Tide. It is also necessary to mix this with vinegar to create a mild acid mixture. Acids are used in professional wetcleaning to set dyes and create softening to fabrics. Professional wetcleaning detergents are formulated with acids. Color safe bleach can never be used for wetcleaning wools since they are usually alkaline in nature and will promote shrinkage. Softening agents are used to condition the wool, help prevent shrinkage and promote better feel and texture.**

## **PROCEDURE**

- (1) Fill washing machine with warm water.**
- (2) Add a mild detergent.**
- (3) Add 3 cups of vinegar.**
- (4) Agitate by hand.**
- (5) Extract.**
- (6) Rinse, using a softening agent.**
- (7) Extract using normal speed. Extraction does not ruin wool or promote shrinkage.**

**In order to maximize washing loads you can use this process on a load of delicate wools, silks, knits and fragile fabrics.**

## **DRYING**

**After extraction you need to dry the wool but no longer than 2 minutes. Two minutes drying on a warm cycle will not shrink wool. Longer than 2 minutes on a drying cycle will shrink wool. The 2 minute drying cycle is used to soften the wool before being blocked over a hanger to air dry the rest of the way.**