Educational Innovations®

#SM-10A/B

Mrs. Stewart's Liquid Bluing

Mrs. Stewart's® Bluing (MSB): for over 110 years, the most effective, safe, versatile, economical laundry whitener available!

"MSB" has continued to be the favorite fabric whitener for generations. As home washing tips are passed down from one generation to the next, more and more people are discovering what a unique product MSB is! New attention is being focused on MSB. People are seeking products that are environmentally safe, and they know MSB is non-toxic and biodegradable.

Scores of newspaper articles, "Fixit" columns, and websites make mention of its long-standing history of the whitest-looking clothes! Still, many people do not know just what bluing is, the many uses it has, or why it gives white clothes that "just bought" whiteness.

Blue and White Make the Whitest White

It is said that color experts can distinguish about 300 shades of white. If you look around you at the objects that are white, you will notice the many different shades. Some are pink-white, some are gray-white, etc., but the white which is the brightest of whites, the "whitest white" to the human eye, is one which has a slight blue hue. One of the more dramatic experiments to prove this point is to place a brand new white shirt next to one which has been laundered for perhaps a year or so and notice the difference. They will both look white until placed next to each other, when the new one will appear much whiter, and the blue hue will be evident.

Because blue-white is the most intense white, most artists, when portraying a snow scene, will use blue color to intensify the whiteness. As color experts would explain it, the proof can be seen in a spectrographic comparison of the two whites. The one with the blue added will reflect more light, making it appear whitest. This is why people looking to return their white clothes to their original sparkling white color use Mrs. Stewart's® Bluing.

White Fabric Isn't White

In their original state, white fabrics are far from white. Unbleached cotton fabrics, known to the trade as "gray goods", are yellowish. Raw wool is too, even from the whitest fleece. Most of all the synthetic fibers are not white, but tend to be a grayish off-white. These all have to be bleached,

362 Main Avenue
Norwalk, CT 06851

Phone (888) 912-7474
Fax (203) 229-0740

www.teachersource.com

info@teachersource.com

usually by some chemical which removes most of the yellow color. Even this bleaching is not enough. To make white goods acceptable to their customers, manufacturers of sheets, towels, linens, etc. blue them too. So do the makers of shirts and other white clothes.

The Blue Hue Must be Renewed

After the fabric goes into use, the effects of the bleach wear off, soil and stain mar the color, and the material goes to the wash to be cleaned. Detergent and water lift out the dirt and stains, and successive rinses remove the soapy mixture. Sometimes a mild bleach is used to help remove the stains. If all this is thoroughly done, the fabric is clean, but it is not "snow-white". To counteract the rest of the yellow, blue must be added. A little bluing in the washing process or in the last rinse water adds the necessary tint that makes it really snow-white.

In the early 1900's, bluing was used by everyone who wanted to have a white wash, and could be found in virtually all laundries. When washing was done by hand or in wringer washers, the second rinse tub was always the bluing rinse, and blue became the accepted color for laundry products. In the ensuing years, most new products, detergents, and other additives were colored blue. Many of the manufacturers even claimed their products contained bluing.

How to Use Bluing

How much bluing should be used? It depends on the washload size and whether it is being used in the wash water or the rinse water. Generally, from a few drops to no more than one-quarter teaspoon is used in a washload. Always dilute the bluing in a container of clear, cool water before pouring into the machine. Avoid pouring bluing from the bottle into the machine when clothes are present, as any fiber can absorb an excess of undiluted bluing, causing blue spotting.

Laundry Additives

There are a number of additives on the market today, and some are truly laundry aids. It is advisable that you determine through experimentation whether a product does what the manufacturer says it will do. If there is no visible advantage to using the product, perhaps it is not necessary! Most of the detergents on the market today do a good job of removing soil and dirt. It may be necessary to add a bleach to aid in removing heavy soil. It would also be prudent to be sure that the additives are compatible with one another. Heavy stains should be pretreated with a good bleach before washing to assure removal of the stains. Repeated bleaching, however, can weaken fibers. MSB is a safe alternative to bleach for whitening fabric. Bluing does not remove stains; it simply whitens.

Did You Think MSB Was Only Used in the Laundry?

In the 110+ years that consumers have been using Mrs. Stewart's® Bluing, dozens of additional uses have been discovered! We know of no other product, laundry or otherwise, that has as wide a variety of uses.

- **Making a Salt Crystal Garden** - Known as a "Depression Flower", or "Coal Garden", children and families have been making this fascinating science project for generations! Teachers, Scouts, everyone!

- **White hair** - White hair can be easily, safely whitened by adding a few drops to the rinse water. Less than a penny per use!

- **White animal hair and fur** - Owners of white dogs and cats have known for years about the benefits of adding a few drops of MSB to their pet's rinse water when bathing. A real blue ribbon winner! Even horse owners find that tails and manes are made to look their whitest.

- **Swimming pools** - By adding a bottle or two where pool water re-enters from the filtering system, pools can look "Pacific Blue" safely. Many pool manufacturers and pool chemical supply houses use it in their display pools. (Try it in your kids' bath water, too!)

- **Fountains** - A California motel owner has been using MSB in his fountain, which he claims has inspired others in his area to display that clear, Pacific blue water in fountains, bird baths, and garden pools. Because MSB does not affect water clarity, it can be used to change otherwise drab-looking water into a pool of beauty.

- **To relieve ant bites and bee stings** - Years ago, the University of Arizona printed a booklet on treatment for snake and insect bites in which it recommended MSB be used to treat the bite of a Red Harvester Ant. They claim it to be "laboratory tested". And countless letters received over the years tell us how immediate the relief is when dabbing MSB on a bee sting!

- **Fine crystal** - A few drops of MSB when rinsing crystalware or glass chandeliers makes them absolutely sparkle, and people tell us they stay clean longer. (Perhaps the bluing repels dust?)

- **Medical uses** - Medical labs have been using MSB for years as a tissue marking dye. MSB is also used extensively in drug testing techniques.

- **Other uses** - MSB has been used to trace leaks in automotive cooling systems, drain systems, and toilets. Blue-tipped carnations can be made by adding a little MSB to the vase. Potters use MSB in their glassing techniques. Podiatric labs and sculptors use MSB in making plaster casts.

Educational Innovations' Recipe for Growing Crystals

1. Combine:
    a. 6 parts Mrs. Stewart's Liquid Bluing
    b. 6 parts water
    c. 8 parts salt
    d. 1 part ammonia

2. Mix well. There should be undissolved salt remaining on the bottom of the solution.

3. Pour solution in shallow bowl or dish. Spoon excess salt into dish as well.

4. Place porous material in solution and set aside. Good materials include blotter paper, charcoal briquettes, and pieces of sponge.

5. Within a few hours, small crystals should begin to form. These crystals may be colored by placing a drop of food coloring directly on the porous substrate.

6. Within a few days, billowing crystals should form.

Mrs. Stewart's Recipe for the Salt Crystal Garden

Day 1: In a shallow glass or plastic bowl, place some pieces of: coal, charcoal, coke, porous brick, tile, cement, or sponge. (A cut-up kitchen sponge works very well.) Over these, pour two tablespoons of water, two tablespoons of salt, two tablespoons of Mrs. Stewart's Bluing, and two tablespoons of household ammonia.

Day 2: The next morning, add two tablespoons of salt.

Day 3: On the third morning, pour into the bottom of the bowl (not directly on the base materials, which should be showing growth by now) two tablespoons each of salt, water, SB, and ammonia. At this time, you may add a few drops of food coloring or ink to each piece for additional color.

Tips:
A free circulation of air is necessary, and the drier the air, the better. To keep your Salt Crystal Garden growing, simply add more MSB, salt, water, and ammonia from time to time. The coral-like formations are formed by the recrystallization of the salt upon evaporation of the liquid. The base material (sponge) draws the salt-saturated liquid up by capillary action and provides more surface area over which the liquid can evaporate. The microscopic bluing particle acts as a nucleus around which the salt can recrystalize. The rate of growth depends largely on the humidity of the surrounding environment, taking from hours to days to begin. (There are many variations on this recipe - most use the same ingredients.)

Add a few pipe cleaners in tree-like shapes stuck into the sponge for a beautiful "ice garden" effect.

For crystal Christmas trees, make a stand-up tree out of blotter paper and set it into the ingredients above - watch the magic!

