

Consumer Choices

Getting better laundry results

If you read the garment care label and know basic laundering steps, you can get better laundry results.

With automatic washers, dryers, modern detergents, and the durable fabrics of today, washing clothes should be easy. But, despite these advantages, laundry problems occur. Sometimes, doing the wrong thing in laundry and stain removal can ruin clothes. This fact sheet will explain the basic laundering steps that will help you get better laundry results after you have read the garment care label for its directions.

Pretreat stains of washable clothes; take drycleanable items to the cleaner

- Soak protein stains in cold water (milk, egg, soybean formula, ice cream, blood and meat juice, or any food stain that contains these ingredients).
- Pretreat oily collar soil, grease, or oil stains with liquid detergent or pretreatment spray.
- Do not pretreat tannin stains (cola drinks, coffee, tea, and fruit juice) with soap. Soap will cause these stains to set and become permanent.
- Dye stains, such as felt tip marker, require use of bleach, if item is washable, white, or colorfast.
- For combination food stains or difficult stains such as chewing gum, pencil, etc., consult a stain removal guide.
- Do not treat rust-colored stains with bleach; use rust remover.

Prepare clothes for washing

- Empty pockets to remove crayons, ticket stubs, tissues, paper, ballpoint pens, coins, nails, etc.
- Close zippers and Velcro® to prevent snagging of fabrics.
- Turn jeans and dark colored clothes inside out to prevent color streaking.
- Put panty hose and items with long ties in a mesh bag to prevent tangling and subsequent tearing.

Sort the clothes before loading

- Separate whites from colors.
- Separate lint-givers (terry towels, cotton

sweats, cotton/ramie knits) from lint-takers (synthetic blends, smooth, dark or wrinkle-free fabrics).

- Separate the lightly soiled from the heavily soiled.
- Always keep pesticide-soiled clothing separate from family laundry before and during washing.
- Do not put too many clothes in one wash load. Free movement of the clothes during agitation in washing is needed for best cleaning.

Choose washer settings

- Cycle—Adjust according to type of load—white cotton, synthetic, permanent-press or wrinkle-free items, knits, delicates.
- Water level—Adjust according to amount of clothing, except use highest level for all loads of pesticide-soiled clothes.
- Time—With newer washers, wash time is set by the cycle chosen. A 10-12 minute wash cycle is needed for regular loads; 8-9 minutes for synthetics and knits; 3-4 minutes for delicate items and washable wools.
- Agitation—Again, this is set by the cycle. Rigorous agitation helps remove heavy soils. Slower speeds are used for delicate, lightly soiled items. Excess agitation causes wool shrinkage.

Choose water temperature

HOT—120 - 140°F

Use for white cottons, underclothes, pesticide-soiled items. Hot water is required to kill bacteria.

WARM—85 - 105°F

Use for synthetics, knits, wrinkle-free or permanent press items.

COLD—65 - 75°F

Use with liquid detergent for dark or bright colored clothes and for rinse. Water temperatures below 60°F are too cold for detergents to be helpful.

Note: The effective water temperature in your washer depends on the water heater settings, the distance from the hot water heater to the washing machine, pipe insulation, and how warm the washer tub is. If "WARM" is selected,

the washer mixes at least 50 percent (or 60 percent) cold with the hot water automatically. Hot water heaters are usually set at 120°F to prevent scalding of children or elderly family members based on Consumer Product Safety Commission guidelines, but can be adjusted higher by homeowners. If the clothes washer is filled before the hot water supply is replenished after family showers, dishwashing, etc., the water may be cooler than expected.

Consider water hardness and quality

- Hard water minerals, such as calcium and magnesium, react with soaps to form a sticky curd that is difficult to rinse out of clothes. It also reduces the cleaning ability of detergents.
- If your water is extremely hard, a softening treatment system can be installed. If only the hot water supply is treated, hardness will vary with the wash cycle chosen.
- Water containing excessive iron must be treated to prevent rust stains on clothes.
- In hard water, detergents that contain silicate or carbonate builders can deposit insoluble particles on clothes making them feel harsh and look dull.

Detergents help remove soil

- Most detergents are more concentrated now than in the past, so less is needed per wash load. Use the amount of detergent the package or bottle recommends for the size and type of load to be washed.
- Heavy-duty liquid laundry detergents dissolve regardless of water temperature.
- Powdered detergents dissolve much better in hot water than cold. In cold water they may leave a powdery residue on clothes because they do not dissolve.
- Many detergents are phosphate free; most have the phosphate percent listed on the label. Phosphates may be banned in some areas for environmental reasons.
- Most detergents contain enzymes to help remove food stains: amylase for starch; protease for protein; and lipase for fats. Optional ingredients include perfume, fabric softener, and bleach.
- Detergents may contain cellulase enzymes to help remove fuzzy surface fibers and pills (fuzz balls) that appear on cellulosic fiber (cotton, linen, lyocell, ramie, and rayon) fabric blends with wear. This removal of fuzz may add to the lint in the wash load and may show

on dark clothes, if not dryer dried. Tumble drying helps remove lint.

- The amount of foam on the wash load does not show the cleaning ability of the detergent. Extra foam from too much detergent may interfere with rinsing and can cause yellowing and a harsh feel in clothes.

Bleaches and additives

Liquid-chlorine bleach

- Liquid chlorine bleach is the most effective whitener and sanitizer. But, it can damage cellulose, silk, and wool, as well as fade or change colors of fabrics of any fiber content.
- Follow the colorfastness test directions on the bleach package to check if safe for fabric.
- Measure and dilute bleach before adding it to the wash load, if the washer lacks a bleach dispenser.
- Never pour full strength liquid chlorine bleach onto a wash load; it can cause color fading and may weaken fabrics leading to premature holes or tearing.
- Do not soak cottons in bleach solutions for more than 15 minutes for purposes of stain removal. If the stain has not changed in that time, it will not be removed by the bleach.
- Do not use liquid chlorine bleach on garments of silk, wool, spandex, polyurethane foam, rubber, or with those having rubber- or spandex-containing elastic.
- Concentrated bleach solutions or excess soaking time can weaken cellulosic fibers.

All-fabric bleaches

- Powdered sodium perborate or sodium permanganate bleaches are slower acting.
- These may be safe for colors.
- Measure and follow all package directions.

Fabric softeners

- Fabric softeners help reduce clinging, static, and may help reduce soiling.
- Fabric softeners are highly concentrated now; use recommended label amount.
- Fabric softeners can reduce absorbency of towels and diapers, if over-used.
- Fabric softener sheets can leave oily appearing splotches on medium colored items, if over-used.

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File: Textiles and Clothing 1

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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Jack M. Payne, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.