

Confused about Laundry Products?

by

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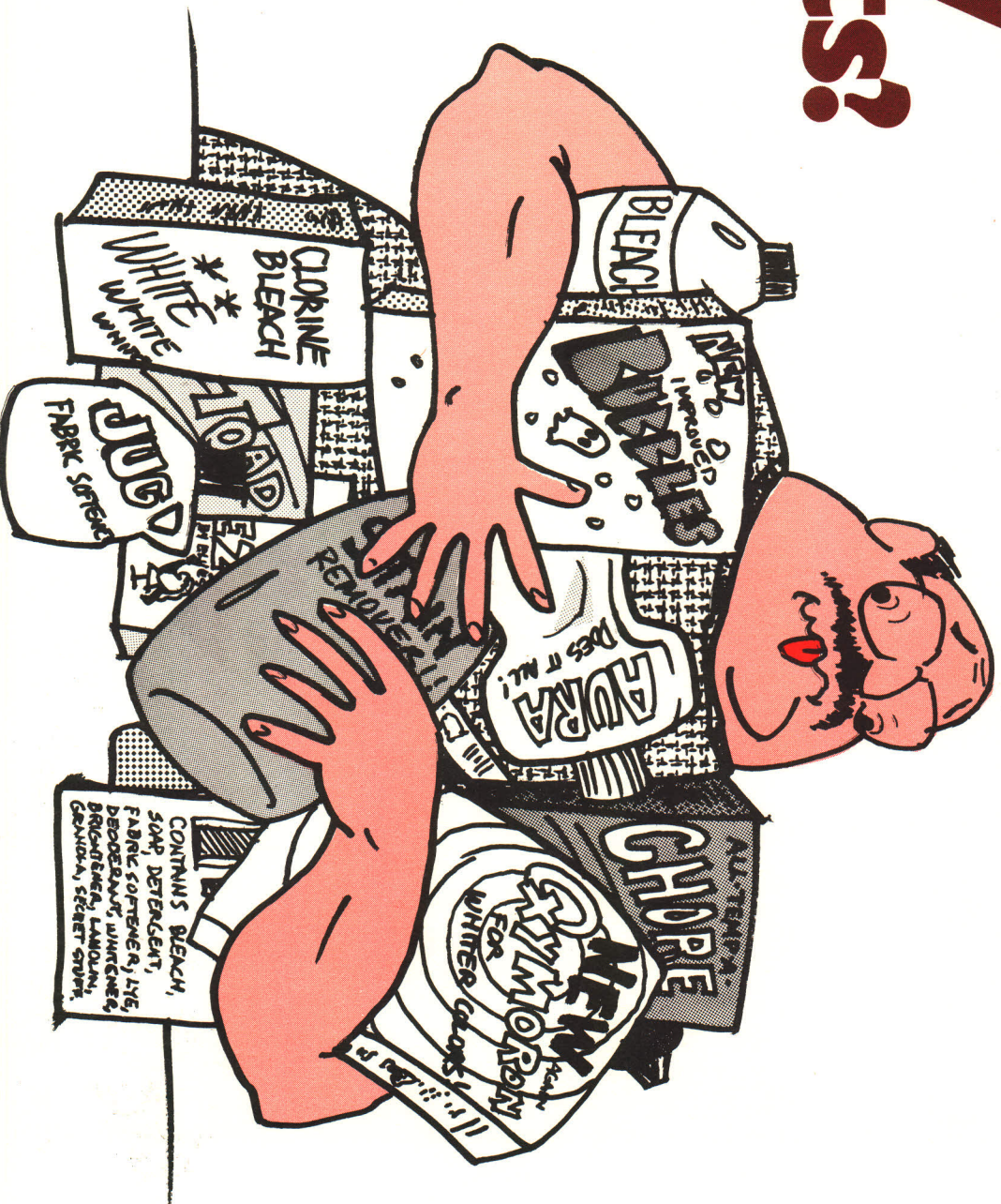
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Use the information in this bulletin to make the most of your laundry dollars by selecting only those products you actually need and using them in the most effective way for the best results.



Why do we use so many more laundry products than our parents did to get laundry clean? First, we have more synthetic fabrics, which hold oily dirt and therefore are more difficult to clean. Second, nonphosphate detergents (required by law for water quality reasons) do not usually clean as well as phosphate detergents, especially in hard water. So, additional products may be required to do the job. Third, we wash more often in warm or cold water instead of hot to save energy. This requires extra chemical cleaning power. Fourth, many consumers overload washers and do not use enough detergent for larger size loads. A combination of these conditions can lead to unsatisfactory results and increase the need to use special laundry products.

Often, laundry aids are advertised as miracle products that promise magic results. They are not miracles, but they can help overcome certain laundry problems if used correctly. The chart in this bulletin defines each type of product, explains what it should do when and how to use it effectively. It also gives some examples of current brands (others may be available). Be sure to carefully read the directions and precautions on the product label before using it so that you use only the products you need, get the most effective results and can make the most of your laundry dollars.

Water Temperatures

Hot water usually means temperatures of 130°F to 140°F. Warm water usually means temperatures of 90°F to 110°F. Cold water usually means temperatures of 60°F to 85°F. The warmer the wash cycle water, the more effectively most laundry products will clean. Rinse cycle water temperature does not affect soil removal.

*Test for

Colorfastness

Mix 1 TBSP bleach and ¼ cup water. Apply one drop to garment seam. Let set one minute. Blot dry. If colors do not change or dyes do not bleed, you may safely bleach the fabric.

Chlorine Bleach

Chlorine bleach is good for general cleaning and soil removal and where the removal of the color of the stain is important, such as coffee, tea, mustard, etc. Do not use bleach to remove iron stains, however. Use only products recommended especially for rust stains.

Chlorine bleach is safe for most fabrics except silk, mohair, wool,

spandex, and flame retardant cottons. It is even safe on colors, if they are colorfast (see "Test for Colorfastness," above). Many people have problems because they use it incorrectly. For best results:

- Always dilute and then add to wash water. Do not pour directly on clothes. This weakens fabrics, fades colors, and may cause holes.
- Always measure and do not use too much. The maximum dose is 1 TBSP/gal. of wash water. To determine how much bleach to use, check the capacity of your washer—capacity averages 16 to 22 gal. for front loaders and 8 to 9 gal. for top loaders. It may be better to use a small amount more often, than the maximum amount occasionally.

- Never use bleach in combination with ammonia or products that contain strong acids, such as toilet bowl cleaners and rust removers. This produces hazardous gases!

- Chlorine bleach inactivates enzymes. If your detergent contains enzymes, to obtain the best results from each product, wait until the last 5 minutes of the wash cycle to add bleach.

Oxygen Bleach

Oxxygen bleach is safe for all washable, colorfast fabrics but has a milder action than chlorine bleach. Be sure to test fabrics for

colorfastness before washing with oxygen bleach for the first time. Oxygen bleach does not inactivate enzymes, so it may be used with enzyme products.

Enzymes

Enzymes are chemicals that are found in all living things and they speed up chemical reactions. Therefore, enzymes are helpful for laundry purposes because they aid in the breakdown of organic stains (proteins, carbohydrates, and fats) in the same way enzymes in the human body aid in digesting food. In laundry products, these enzymes “digest” or break down the organic stain so it is more easily washed away by detergent. Enzymes are especially good for stains such as blood, milk, eggs, gravy, collar and cuff soil, etc. They also help whiten grayed or yellowed fabrics. Be sure to soak fabrics for at least ½ hour and follow instructions listed on the product label.

Prespotters

Prespotters contain petroleum distillates and alcohol, among other things, to help break down stains. Liquid and aerosol prespotters work particularly well on greasy and oily stains, especially on synthetic fabrics.

Use prespotters according to the instructions listed on the product label and wash immediately. Do not allow treated fabrics to set for several hours or days before washing because the product may affect color. You may also find it helpful to pretreat stains with liquid detergent or a paste of dry detergent and water.

Boosters

Laudry boosters are made from a variety of ingredients and thus have a variety of purposes. Because specific labeling is not required it is difficult to know what will work best on different cleaning problems. By trial and error, you may find one you like. Or, you may find that you do not need them when if you use the correct amount of detergent, other products, and the proper water temperature.

When using boosters, always follow instructions listed on the product label. If you have questions regarding use or the ingredients in a specific product, write or call the manufacturer. Many products list a tollfree telephone number on the product label for this purpose.

Fabric Softeners

Fabric softeners do not increase soil removal. They lubricate fibers to make the fabric feel softer and smoother, and reduce static cling and wrinkles. They do not affect water softness.

Fabric softener spilled directly on fabrics can cause stains. Also, staining can occur by prolonged contact with a softener sheet in the dryer and/or too hot temperatures. To prevent stains, dilute rinse-added softener before you add it to the washer, add wash-cycle softener to wash water before adding clothes, or use dryer loads large enough to tumble freely in the dryer at moderate temperatures. If a stain does occur, remove it by rubbing it with a bar of soap and then rinsing.

If you use rinse-added softeners do not use any other laundry products in the rinse water—no water softener, no bluing, nothing—because these may interfere with the fabric softener action.

Because fabric softeners can build up on fabrics and decrease absorbency, do not use them each time you launder. Skip every fifth wash or so. Do not use softener on towels, diapers, or similar items where absorbency is very important.

LAUNDRY PRODUCT AND ACTIVE INGREDIENT	EXAMPLES OF BRANDS	USES	SAFE FOR FABRICS
Bleach, Chlorine Sodium Hypochlorite—5¼-6%	Clorox, Purex, Roman, Amway-Dry, Chlorine Bleach, Store Brands	Oxidizes soil to clean, whiten and brighten. Removes stains—especially coffee, tea, mustard, wine and others that enzymes do not—by removing the color of the stain. Disinfects bacteria and some harmful viruses.	Safe for all washable colorfast fabrics.* Do not use on silks, woolsens, mohair, spandex or flame-retardant treated fabrics.
Bleach, Oxygen Sodium Perborate Potassium Monopersulfate Hydrogen Peroxide 3-6%	Snowy, Clorox II, Beads of Bleach, Store Brands	Oxidizes with a mild action to clean, whiten, brighten and remove soil and stains.	Safe for all washable colorfast fabrics.*
Bluing	Mrs. Stewart's (liquid), LaFrance (powder)	Absorbs the yellow portion of the light spectrum, which makes fabrics appear brighter, especially whites.	Safe for all washable fabrics.
Boosters <i>Contain one or more of the following:</i> Surfactants Builders Enzymes Borax Corrosion Inhibitors Fluorescent Brighteners	Amway Smashing White, Amway L.O.C., Miracle White (liquid), Climalene, Arm & Hammer Washing Soda Booster	Enhance the cleaning power of detergents. They will affect the following, depending on the product type and ingredients: soil/stain removal, breakdown of grease, buffering, whitening/brightening, water softening.	Follow instructions on product label.
Borax Sodium Tetraborate	20 Mule Team, Borateem, Purex Diaper Sweet	Maintains alkalinity to aid detergent action, especially on oily stains. Loosens soil and stains. Controls ammonia odor when used as a diaper soak. Sometimes included in detergent formulas.	Safe for all washable fabrics.
Color Removers Sodium Hydrosulfite	Rit Dye Remover	Removes some stains - rust, ink, iodine. Tends to brighten white synthetic fabrics.	Follow instructions on product label.
Disinfectants Chlorine Bleach	Clorox, Purex, Roman, Store Brands	Destroys harmful bacteria and some viruses.	All colorfast washables except silk, wool, spandex and flame-retardant fabrics.
Quarternary Compounds	Roccal, Coop Sanitizer		Follow instructions on product label.
Phenolic	Pine-Sol, Lysol,		Follow instructions on product label.
Pine Oil Products	Pine oil in name		Follow instructions on product label.

WHEN TO ADD**RECOMMENDED WATER TEMPERATURE****SPECIAL NOTES AND WARNINGS**

Normal bleaching time is 3-5 min. If detergent contains enzymes, wait until last 5 min. of wash cycle to add bleach. Always dilute—do *not* pour in directly.

Works in any water temperature. More effective in warmer water.

● Always test fabrics for colorfastness before washing in bleach for the first time. * *Always dilute bleach* before adding to the wash and do not pour directly on clothes to prevent fading colors and fabric damage. ● Bleach gradually loses its effectiveness with age, and it inactivates enzymes. Do not use bleach on rust stains. ● Never mix bleach with ammonia.

Add with detergent at the beginning of the wash cycle before adding clothes.

Works best in hot water, but may be used with any water temperature. In cooler water, bleaching takes more time.

Test fabrics for colorfastness before washing with oxygen bleach for the first time. * Do not pour directly on wet fabrics, as it can cause color change or damage the fabric. May be used with enzyme products.

Follow instructions on product label.

Follow instructions on product label. Most boosters are added at the beginning of the wash cycle.

Depends on the product and the cleaning job. Follow instructions on product label.

If in doubt about specific ingredients and use, call or write the company. Many have toll-free numbers.

Add with detergent at the beginning of the wash cycle or use as a presoak.

Most effective in warm water.

Follow instructions on product label.

Wash or rinse.

Any temperature—warm or hot is best.

Always test for colorfastness. * Do not pour directly on clothes. Measure and dilute as directed.

Add to rinse cycle.

Any temperature.

Inactivated if used with soap or detergent. Available in hardware, industrial supply or farm supply stores.

Add to either wash or rinse cycle.

Hot or warm.

Add at beginning of wash cycle, before clothes.

Hot or warm.

Must be at least 70% pine oil. Not effective in cold water.

LAUNDRY PRODUCT AND ACTIVE INGREDIENT

EXAMPLES OF BRANDS¹

USES

SAFE FOR FABRICS

Enzyme presoaks
Amylase
Protease
Lipase

Biz, Action, Amway Tri-zyme

Loosen stains so washing action will remove them. Work well on most food and organic stains, especially blood, body oils, milk and manure. Some products contain other additives, such as surfactants, to enhance detergent cleaning power.

Safe for all washable fabrics and colors. Long soaking time may cause color bleeding or fading. Enzymes themselves do not affect colors.

Fabric Finishes
Sodium Carboxymethyl Cellulose

Adds body to fabrics; enhances soil resistance; facilitates soil removal; makes ironing easier.

Synthetics.

Fabric Softeners
Rinse Cycle Type

Downy, Final Touch, Nu-Soft, StaPuf, Store Brands

Makes fabrics softer, fluffier; reduces static electricity and wrinkling; prevents linting. Tends to reduce absorbency.

All washables, mainly cottons and synthetics.

Wash Cycle Type

First-In, Rain Barrel, (also in some detergents Bold III, Fab, Solo, and Yes)

Dryer Type

Cling Free, Hilex, Toss-N-Soft, Bounce, Free-N-Soft, Store Brand

All dryable fabrics. May leave oily stains on synthetics.

Prespotters

Contain one or more of the following:

Petroleum Distillates
Alcohol
Surfactants

Shout, Spray 'N Wash, Clorox Pre-Wash

Penetrates fabric fibers and helps break down, dissolve or alter soil, stains or grease so that they may be washed away.

Safe for most washable, colorfast fabrics. Be sure to follow instructions on the product label.

Rust Removers

Amway Redu, Whink, Gartside

Removes iron stains.

Follow instructions on product label. Do not use on wool or silk.

Spot Removers, Dry Formula

Touch 'N Go, K₂R Spot Remover

Removes specific spots or stains.

Follow instructions on product label.

Sizings
Polyvinyl Acetate

Adds body to fabrics; enhances soil resistance; facilitates soil removal; makes ironing easier.

Synthetics.

Starches
Grains

Adds body to fabrics; enhances soil resistance; facilitates soil removal; makes ironing easier.

Mostly cottons.

Water Softeners or
Water Conditioners

Calgon
Spring Rain
White King
Blue Rain Drops

Ties up hardness minerals by: a) holding the minerals in solution (non-precipitating); or b) removing the minerals by forming a precipitate that can settle out (precipitating) so that detergents can clean better.

All fabrics.

¹Brand names of products listed are examples only; there may be others available. The Michigan Cooperative Extension Service does not recommend or endorse any specific brands.
²Refer to "Steps to Brighter Laundry" #E-1945 for more information.

WHEN TO ADD

Soak at least 1/2 hour or overnight. Do not add chlorine bleach until after the soaking period because it will inactivate enzymes. Safe with oxygen bleach.

RECOMMENDED WATER TEMPERATURE

Use cool water for blood, egg or milk stains. Use warm water for most other stains. Do not use hot water.

SPECIAL NOTES AND WARNINGS

Enzymes are inactivated by hot water and chlorine bleach. Does not remove color of stains as bleach does—just loosens stains to help remove them. Does not remove hydrocarbon-based oil and grease. Does not attack metal, enamel or glass containers.

Use slightly lower iron temperature.

Rinse cycle. Dilute before adding. It will stain fabric if poured directly on it.

Any temperature.

Always dilute first. Fabric softener stains will attract rust and soil and build up to a gray or grease-like stain. Adjust amount to size of load. To prevent build-up, skip using after several loadings. Do not use on items that need to be absorbent, like towels.

May be used in the rinse cycle as well. Follow instructions on product label when using in this manner.

With laundry detergent.

Before washing.

Any temperature.

May spot some synthetics. If translucent spot develops, rub with bar soap and rinse in clear water. Do not use with hottest temperatures in commercial dryers. Wash items immediately after applying a pre-wash treatment. Allowing the item to set before washing may affect color.

Follow instructions on product label.

Follow instructions on product label.

Use slightly lower iron temperature.

Follow instructions on product label.

Add at the beginning of the wash cycle. If iron is a problem, add during the rinse cycle also.

Any temperature.

A mechanical water softener installed in the plumbing system of a home is an alternative to using these products.

Additional Information

For additional information, refer to the following bulletins. They are available from your county Cooperative Extension Service Office or the MSU Bulletin Office, P.O. Box 6640, East Lansing, MI 48823-6640.

E-1945 *Steps to a Brighter Laundry*
(Price: 50 cents.)

E-1402 *Stain Out! Washable Fabrics*
(Price: 20 cents, single copy free to Michigan residents.)

E-1121 *Saving Energy and Doing Laundry* (Price: 20 cents, single copy free to Michigan residents.)



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