You may be buying more laundry products—bleach, fabric softeners, or other ingredients—than you really need to use the laundry aid too. Consider which laundry aids to save time or the effort of laundering clothes, where the heat melts and spreads the fabric conditioner.

For more information


Three of the publications—fibers and fabrics; information found on garment labels; and drying and colorfastness—are available in the office of the OSU Extension Service that serves your county. Check with that office for current prices.

Reprinted May 1993

This publication is one of a series written to help consumers select, use, and care for today's clothing. Three of the publications—fibers and fabrics; information found on garment labels; and drying and colorfastness—are available in the office of the OSU Extension Service that serves your county. Check with that office for current prices.

For most current information:
http://extension.oregonstate.edu/catalog

Laundry Detergents and Soaps
A. W. Koester

Oregon State University Extension Service publications. In July 1992 the OSU Extension Service announced its intention to end publication of most of its consumers' education materials, including these detergent and soap publications. We are reissuing these publications. The publications listed below may be available in the office of the OSU Extension Service that serves your county. Check with that office for current prices.

This major change is in effect for these publications.

Soaps
Soap has been used since antiquity. They are made by the neutralization (saponification) of fats and oils with alkali. Soap gives a soft lather, and does not irritate the skin. It cleans well and is soft on the fabric. Soaps are a major category of household products.

Detergents
Detergents, which can be classified as light duty and heavy duty, clean as well as soft and hard water. They are derived from many natural and manufactured raw materials. Two major groups of detergents are the soaps and the synthetic detergents. Soaps are made by neutralizing animal and vegetable fats and oils with alkali. Synthetic detergents are made by combining petroleum or coal-tar derivatives with alkali. Detergents are also classified as light duty and heavy duty. Light duty detergents are primarily used in hand washing; heavy duty detergents are used in automatic machines. Light duty detergents and synthetic detergents are the most commonly used today.

The following sections deal with light-duty detergents and synthetic detergents. The discussion includes the types of detergents available; those that are currently available; and some specialized garment detergents. The latest developments are premeasured detergents, which are convenient, reliable, and simplify the use of detergents. Most consumers are familiar with these detergent units and appreciate their convenience. The convenience of the detergent package is the fourth change.

The second change is a decline in the use of soaps for handwashing and a greater use of durable press finish, and more efficient detergents. Manufactured fibers have more heat sensitive and are more temperature dependent than cotton. Lower temperatures also reduce wrinkling and dissolve press finished fabrics.

The third change is a decline in the number of people who iron their clothes. The use of cotton and durable press and dry cleaning fabrics has resulted in pressure to reduce or eliminate phosphates from detergents. In recent years detergent manufacturers have been working on detergent that do not contain phosphates. The latest developments are premeasured detergents, which are convenient, reliable, and simplify the use of detergents. Most consumers are familiar with these detergent units and appreciate their convenience. The convenience of the detergent package is the fourth change.

To use the detergent, consumers can add the recommended amount to the wash water. The change in fabrics has affected the use of laundry products. As manufacturers work on reformulating powdered detergents to reduce or eliminate phosphates, consumers want increased convenience, which is the fourth change.
Detergent ingredients

Detergents contain a variety of substances in their ingredients. The two major ingredients in detergents are surfactants (cleaning agents) and builders. Surfactants are responsible for helping the detergent solution penetrate and loosen soil. Builders help to control water hardness and keep soil from redepositing on cleaned fabrics. Detergents need surfactants and builders to be effective. Today's detergents are more complex than those in the past; they contain a variety of surfactants, builders and other ingredients.

Surfactants

Surfactants are the ingredients in detergents that allow them to work in water. Some detergent manufacturers use surfactants that are water-soluble; others use surfactants that are oil-soluble. However, most surfactants are water-soluble in detergent solutions and help to remove soil by reducing the surface tension between the soil and water. This allows the detergent solution to penetrate the soil and transport it away from the fabric. Surfactants also help the detergent solution to penetrate and remove more soil from fabrics. Surfactants can be classified as follows:

- Anionic surfactants
- Nonionic surfactants
- Cationic surfactants
- Amphoteric surfactants

Anionic surfactants

These surfactants are negatively charged and are used in detergents because they are effective in low pH solutions and remove soaps more efficiently than other surfactants. Anionic surfactants are dissolved in water and combine with soap to form micelles, which are clusters of surfactant molecules that surround and suspend soils in the wash water. These surfactants are usually used as surfactants in detergents and are most effective in hard water. Anionic surfactants include soaps, alcohols, fatty acids, and alcohols. Anionic surfactants are also used in laundry detergents to help remove soils such as grease, oil, and fat. Anionic surfactants are most effective in hard water.

Nonionic surfactants

These surfactants are not as effective as anionic surfactants, but they are still used in detergents because they are not as harsh as anionic surfactants. Nonionic surfactants are not affected by changes in pH and are less likely to cause skin irritation. They are also used in detergents for their excellent wetting properties. Nonionic surfactants are not as effective as anionic surfactants in removing soil, but they are still used in detergents because they are not as harsh as anionic surfactants.

Cationic surfactants

Cationic surfactants are positively charged and are used in detergents because they are effective in hard water. Cationic surfactants are also used in laundry detergents to help remove soils such as grease, oil, and fat. Cationic surfactants are most effective in hard water.

Amphoteric surfactants

Amphoteric surfactants are surfactants that have both anionic and cationic properties. They are used in detergents because they are effective in hard water and can be used in a variety of applications.

Builders

Builders are substances that are added to detergents to help remove soil. Builders are divided into two categories:

- Water softeners
- Soil redeposition inhibitors

Water softeners

Water softeners are added to detergents to help remove soil from fabrics. They are used in detergents to help remove soil from fabrics, especially in hard water. Water softeners can be classified as follows:

- Sodium carbonate
- Sodium silicate
- Sodium bicarbonate
- Magnesium oxide

Water softeners are added to detergents to help remove soil from fabrics. They are used in detergents to help remove soil from fabrics, especially in hard water. Water softeners can be classified as follows:

- Sodium carbonate
- Sodium silicate
- Sodium bicarbonate
- Magnesium oxide

Soil redeposition inhibitors

Soil redeposition inhibitors are added to detergents to help prevent soil from redepositing on cleaned fabrics. Soil redeposition inhibitors are used in detergents to help prevent soil from redepositing on cleaned fabrics. Soil redeposition inhibitors are used in detergents to help prevent soil from redepositing on cleaned fabrics. Soil redeposition inhibitors are used in detergents to help prevent soil from redepositing on cleaned fabrics.

Inhibitors prevent loosened soil from redusting on cleaned fabrics. Since some builders can cause fabrics to feel harsh after washing, soil redeposition inhibitors are used in detergents to help prevent soil from redepositing on cleaned fabrics.

Fragrances

Fragrances are added to detergents to help mask unpleasant odors and to make the detergent smell good. Fragrances are added to detergents to help mask unpleasant odors and to make the detergent smell good. Fragrances are added to detergents to help mask unpleasant odors and to make the detergent smell good.

Fluorescent whitening agents

Fluorescent whitening agents are added to detergents to help make fabrics appear brighter. Fluorescent whitening agents are added to detergents to help make fabrics appear brighter. Fluorescent whitening agents are added to detergents to help make fabrics appear brighter.

Nonphosphate surfactants

Nonphosphate surfactants are used in detergents to help remove soil from fabrics. Nonphosphate surfactants are used in detergents to help remove soil from fabrics. Nonphosphate surfactants are used in detergents to help remove soil from fabrics.

Nonphosphate surfactants are used in detergents to help remove soil from fabrics. Nonphosphate surfactants are used in detergents to help remove soil from fabrics. Nonphosphate surfactants are used in detergents to help remove soil from fabrics.

Nonphosphate surfactants are used in detergents to help remove soil from fabrics. Nonphosphate surfactants are used in detergents to help remove soil from fabrics. Nonphosphate surfactants are used in detergents to help remove soil from fabrics.
Laundry Detergents and Soaps
A. W. Koester

This publication is one of a set written to help consumers select appropriate detergents and soaps for use in home washers and dryers, and care for today's clothing.

Three of the publications—fibers and fabrics; information found on garment labels; and dyeing and colorfastness—are available in this book. The publica-

Detergents, which can be classified as light-duty and heavy-duty, clean well in both soft and hard water. The light-duty detergents include liquid hand-dishwashing detergents and some neutral-soap laundry detergents. Light-duty detergents are made by the neutralization (saponification) of acids with alkalis. They include mild soaps, which don't clean as well. Few laundry soaps are available; those that are include Ivory Snow and Whirlpool Liquid. Detergents now contain laundry aids such as enzymes, bleaches, or fabric conditioners. The latest developments are permanent-press agents of detergent.

Soaps have been used since antiquity. They are made by the neutralization (saponification) of fats and oils with alkalis. Soaps are mild and suitable for handwashing delicate fabrics. Detergents and developing alternatives to soaps are used in the preparation of light-duty detergents. Brands of light-duty liquid detergents include Palmolive, and Sunlight dishwashing liquids; Dettol; Palmolive; and Delicare and Woolite liquids for handwashing laundry; and Soft Scrub and Fast Acting for handwashing soaps.

Today's clothing care services discuss working with a dry cleaner.
You may be buying more laundry products than you need. Consider which laundry aids to save time or the effort of that you really need to use the laundry aid too.

That act as laundry aids, consider whether the detergent contains enzyme, oxygen

Another convenient form is a nonwoven product is a detergent gel or paste in a pouch for individual loads of laundry. One new

printed on the nonwoven package. The outer compartments, and fabric conditioner

The Laundry


Cleanliness Facts. NY, NY: The Soap and Detergent Association, 8.

Detergents In Equation.


Aids.

EC 1283

Reprinted May 1993

EC 1283

This publication is one of a set written to help consumers evaluate laundry aids and care for today's clothing.

Three of the publications — fibers and fabrics, information found on garment labels; and dying and colorfastness — aid consumers in evaluating clothing and household textiles. They on laundry aids and laundry detergents and soap help consumers choose effective cleaning products. The Publica-

For more information


Laundry Detergents: A Look at Some New


Garment Labels: The Consumer's

Selecting and Using Laundry

ers in evaluating clothing and aid consum-

—

written to help consumers select

detergents and soaps help

Soaps have been used since antiquity. They are made by the neutralization (saponifica-

Detergents, which can be classified as light duty and heavy duty, clean well in both soft and hard water. They are made by the neutralization (saponifica-

Detergents now contain laundry aids such as

Soaps have been used since antiquity. They are made by the neutralization (saponifica-

Detergents designed for laundry are


Soaps have been used since antiquity. They are made by the neutralization (saponifica-

Soaps have been used since antiquity. They are made by the neutralization (saponifica-

Three of the publications—fibers and fabrics, information found on garment labels; and dying and colorfastness—aid consumers in evaluating clothing and household textiles. Thre

A recent trend is packaging of detergents for individual loads of laundry. One new product is a detergent gel or paste in a pouch that act as laundry aids, consider whether the detergent contains enzyme, oxygen

Add $ 1.00

For most current information:

http://extension.oregonstate.edu/catalog