

TODAY'S

C L E A N I N G

**Consumer information
about household
cleaning products**



THE SOAP AND DETERGENT ASSOCIATION

SDA

About The Soap and Detergent Association

The Soap and Detergent Association (SDA) is the national trade association representing manufacturers of cleaning products and their ingredients. SDA member companies produce more than 90% of the household, industrial and institutional cleaning products marketed in the U.S.

Established in 1926, SDA develops and shares scientifically sound information about industry products with the technical community, government bodies, educators, communicators, consumers and other key audiences. This includes information on the human and environmental safety of cleaning products and their ingredients; the safe and effective use and disposal of cleaning products and their packaging; and the contributions of cleaning products to personal and public health.

The goal of these and other SDA information activities is to help policy makers, opinion leaders and consumers make informed decisions about the products of the soap and detergent industry.

Distributed in the form of publications, educational programs, reports, seminars and conferences, SDA information includes:

Detergents — In Depth

A series of national conferences to update educators and community leaders on cleaning products and related topics.

The ABCs of Clean

An educational program for teaching preschool children, their teachers and parents the health benefits and how to's of proper handwashing and surface cleaning.

Home Safe Home

A leaflet on safety practices for protecting young children from potential dangers in the home.

Biodegradation

A reprint of presentations on the role of biodegradation in environmental safety assessments of cleaning product ingredients.

Surfactant Reviews

A series of reports summarizing scientific data relevant to the human and environmental safety of major surfactants used in cleaning products.

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SDA Information Kit

INTRODUCTION

Back in 1861, Mrs. Isabella Beeton set out to remedy the “discomfort and suffering” in households that came with “untidy ways.” Her subsequent book, *Beeton’s Book of Household Management*, became essential reading for women of her times, who were judged by the spotlessness of their homes.

Few people today have the time or inclination to maintain white glove standards, yet they still want a clean home. Families struggle to balance other priorities — child care, jobs, leisure activities — and when they do find the time to clean, they want to do it quickly and effectively.

Fortunately, cleaning products have kept pace with changes in consumers’ lifestyles. The “elbow grease,” scrub

brushes and buckets of hot water that were indispensable in the “good old days” have gone the way of the washday blues. Today, the products themselves do more of the work. That means less personal time and effort spent cleaning than ever before.



While consumers value these improvements, they also want assurances that cleaning products are safe for use around the home and for the environment. The Soap and Detergent Association (SDA) has developed this Information Kit to explain how today's products meet consumer needs for safe, convenient, cost-effective and environmentally responsible cleaning.

By answering common questions and sorting out some of the confusion surrounding household cleaning products, SDA hopes to help consumers make more informed choices about these essential products. ●



Today's Cleaning Products – An Overview

If Mrs. Beeton were alive today, her top priority for a cleaning product would be the same as it was in 1861 — effectiveness. Thanks to science, it's no longer necessary to make her recommended mixture of vinegar, dried fowl droppings, soap and onions to get whiter whites. Research into soils, fabrics and surfaces, together with advances in the chemistry of cleaning, have enabled today's manufacturers to provide the most efficient combination of ingredients to accomplish the intended job.

How Do They Work?

Cleaning products used in the home can be grouped into four general categories: personal cleansing, laundry, dishwashing and household cleaning. Within each category are different product types for meeting the wide variety of consumer lifestyles and cleaning needs.

The key ingredients in most cleaning products are **surfactants**. A surfactant works with water to loosen and remove soil and keep it from redepositing on a surface.

Other ingredients may also be

needed for effective cleaning. **Water softeners** or **builders** reduce water hardness and improve the cleaning power of the surfactant.

Antiredeposition agents help prevent loosened dirt from resettling on fabrics and tableware.

Bleaches help remove stains and odors, as well as whiten and brighten. **Enzymes** break down specific soils. **Disinfectant** products have an antimicrobial ingredient to kill germs and help prevent their spread.

Preservatives protect the product from decay and discoloration. **Abrasives** provide scouring or polishing action.

Why Is Cleaning Important?

Personal hygiene and regular housecleaning are essential to good health. The widespread use of soaps and detergents has been a proven contributor to advances in human health and well-being over the last century and a half. In fact, frequent handwashing with soap and water is recognized by the Centers for Disease Control and Prevention as one of the best ways to prevent the spread of infectious diseases. And regular cleaning of household surfaces

removes dirt and food particles on which germs can grow, as well as dust and molds that contribute to respiratory irritations and allergies.



Today's Cleaning Products – An Overview

Manufacturers of soaps and detergents have been in the forefront of plastics recycling efforts. Products are generally packaged using two of the most commonly recycled plastic resins, HDPE and PET, which makes their packaging easier to reprocess and use again. Most primary and refill plastic packages contain post-consumer recycled content — up to 100% in some cases. This use of recycled plastics makes the soap and detergent industry a major purchaser of the plastics that consumers recycle in their communities.

Cleaning product manufacturers have also promoted recycling by using up to 100% recycled paperboard in product cartons and 25% recycled steel in steel aerosol cans.

Considering Value

Cleaning products have evolved over the years to respond to the needs of changing consumer lifestyles, and scientific advances have made cleaning far simpler and less time-consuming. One element has remained consistent, however — good value. The enduring affordability and performance of cleaning products make it possible for virtually everyone to enjoy their benefits.

Given the chance, would Mrs. Beeton have used today's household cleaning products, designed and tested for top performance and safety? We think she would have. ●

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RESOURCES

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Some Facts About Mix-at-Home Cleaners

"Grandma's recipes" for home cleaning

have been a part of household lore for years. Lately, these recipes have been promoted as a "safer" alternative to commercially formulated cleaning products. While we may feel comfortable using these ingredients in cleaning applications, perhaps because some are edible, there are important facts about these recipes to consider. Ignoring these considerations may mean missing some safety assurances, spending more, getting less performance, and even losing the important health benefits of cleaning.

Q: Do mix-at-home cleaners contain chemicals?

A: All cleaners, whether commercially formulated products or mix-at-home recipes, are composed of chemicals — whether they contain food ingredients extracted directly from a plant or chemicals synthesized in a laboratory.

Q: Are the chemicals in mix-at-home recipes non-toxic?

A: All chemicals, including common table salt (NaCl), are toxic at some exposure. Toxicity is the level of exposure at which something can be harmful. Commercially

formulated cleaning products are evaluated for both intended and unintended exposures, so that non-toxic levels of exposure can be clearly identified. Labels provide use directions and safety information that contribute to the safe use of the product.

Before mixing at home, consumers should have equally clear information so that levels of exposure to a mixture's chemicals are kept low enough to be non-toxic.

Q: What does safety information have to do with grandma's household cleaning recipes?

A: Nostalgia for "the good old days" shouldn't take precedence over the important assurances that come with today's commercially formulated cleaning products. These products undergo extensive safety and performance evaluations before they are marketed. The data from these evaluations enable manufacturers to stand confidently behind their products. That's why their names, and often a toll-free phone number, are printed on cleaning product packages.

The individuals or organizations promoting "alternative" recipes should be able to support their recommendations. Consumers should be

Some Facts About Mix-at-Home Cleaners

In areas vulnerable to the spread of infectious diseases, such as kitchens, bathrooms and children's play areas, it's especially important

to disinfect properly. The use of a registered disinfectant according to label instructions will ensure that germs are eliminated. ●

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Some Facts About Cleaning Product Disposal

People don't typically dispose of cleaning

products — they use them up. Empty packages can then be recycled or discarded with other household waste. Unused amounts of cleaning products can generally be safely disposed of down the drain or in the trash. That's not the case with all products found around the home. For those products that do require special handling, such as solvent-based paints, used motor oil and certain pesticides, household hazardous waste collection programs are an important resource. However, to include household cleaning products in these programs is unnecessary and places an additional burden and expense on communities and individuals.

Q: Do I need to save my household cleaning products for household hazardous waste collection days?

A: Generally, no. Cleaning products do not typically contain ingredients that would harm the environment in the quantities that are disposed of by households. The vast majority of cleaning products are water-soluble and are formulated for safe disposal in either municipal or home wastewater treatment systems.

Household hazardous waste programs are intended to handle products that may cause a problem if disposed of by common methods, such as down the drain or in the trash.

Q: What's the best way to dispose of a household cleaning product?

A: The way that makes the best environmental and economic sense is to use it up! If you can't, consider giving the product to a friend or organization that can. Just be sure to keep the product in its original container with the label intact.

Most household cleaning products are designed to go down the drain as part of normal usage. They are then treated by the same systems that treat other wastes from your home.

Q: What should I do if I can't use the product up or give it away?

A: The key to smart use and disposal of any cleaning product is to read the label and follow the directions. If there are no special disposal instructions on the label, then thinking about how you use the product will help you make the right decision.

Some Facts About Cleaning Product Disposal

The rate of recycling for HDPE clear and colored bottles continues to grow, to more than 400 million pounds recycled in 1993 from 358 million pounds in 1992, an 11% increase. PET post-consumer packaging also increased 11% in the same year, up to 448 million pounds in 1993, compared to 402 million in 1992.

Q: What about recycling aerosol cans?

A: A growing number of communities accept empty steel aerosol cans as part of their recycling programs. Read the disposal instructions on the can and check with your local recycling coordinator for details. ●

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Some Facts About "Natural" Cleaning Products

The use of the terms "natural" and "synthetic" to describe cleaning products has led to some confusion among consumers. The best advice is to avoid making assumptions about safety or performance based on a "natural" label alone.

Q ■ What do the terms "synthetic" and "natural" really mean?

A: Consumers should be wary of the term "natural" when used to describe cleaning products. All of the chemicals used to make the ingredients that go into cleaning products are found in nature. Very few chemicals extracted from plants or the earth are used without further processing to obtain ingredients that perform a cleaning function. Thus, the term "natural" to describe a final product can be misleading.

For example, claims for "natural" cleaners usually refer to the surfactant, the product's primary cleaning ingredient. Almost all the products used for personal cleansing, laundering, dishwashing and household cleaning are surfactant-based. Surfactants are chemicals that reduce the surface tension of water, so the water can quickly wet a surface and soil can be loosened and removed. Surfactants are made from petrochemicals (derived from crude oil or natural gas) or oleochemicals (derived from fats and oils). Some types

of surfactants can be made from either raw material source. Petrochemicals are often termed "synthetic" materials, while oleochemicals are sometimes called "natural." Both have "natural" sources, since crude oil is extracted from the earth and oleochemicals come from plants or animals.

Whatever their source, surfactant raw materials have to be chemically converted, or synthesized, before they can become useful ingredients in cleaning products. In its final form, a surfactant based on oleochemicals is similar to the same surfactant based on petrochemicals. This similarity enables manufacturers to use either or both types of surfactants in their cleaning products. Availability, cost, ease of formulation, and desired product form and characteristics are the deciding factors.

Q ■ Is there an environmental advantage to using either petrochemicals or oleochemicals?

A: There is no inherent environmental advantage to using one surfactant source over the other.

Whether the source is animal fat, plant oil or crude oil, there are energy requirements and environmental wastes involved throughout the sourcing and production stages of turning raw materials into surfactants.

