



# CLEANLINESS FACTS

TIPS AND TRENDS FROM THE SOAP AND DETERGENT ASSOCIATION

475 Park Avenue South New York, New York 10016

## THE HOME OF THE '90'S

### Value, Comfort, Efficiency In Demand

As we enter the '90's, staying home has become more important than going out. Home is a haven from the harshness of the outer world, a place where one feels protected and comfortable.

According to information gathered by The Soap and Detergent Association, those seeking this comfort will be middle-aged and increasingly selective in their spending. The age 35-to-65 portion of the population is growing rapidly in size, number of households and purchasing power. This segment has 2.5 times the buying power of 18-to-34 year olds and 4.5 times that of 65-years-plus households. Their purchases are influenced by the fact that they are time-pressed, comfort-seeking and entertainment-driven, as well as communication and environment conscious. They are abandoning the conspicuous consumption of the '80's in favor of products and services that offer better value and higher quality. In short, they are choosing value over hype, substance over materialism.

With the advent of two-income families, leisure time is at a premium. Consumers are looking for products that are easy to buy and easy to use. Combination products or products that allow the consumer to do two things at once, such as phone/fax machines, VCR's that can be programmed with minimum effort and laundry detergents that clean as well as bleach or clean and soften fabrics at the same time, are gaining in popularity. With both parents holding full-time jobs, more and more children will be carrying larger responsibilities. There is an increasing demand for appliances that will make it easy for young teens to assume chores such as preparing a meal or doing the laundry.

The growth in home offices, bringing with it an increase in communications products, is another manifestation of the trend toward staying home. For some, the home office is a luxury, a place to house expensive computers, faxes and printers - the toys of adulthood. For others, the home

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office is a supplement to their 9-to-5 workplace, a way to allay the guilt of long hours spent on the job. For a third group, many of whom are self employed, the home office provides them with a more satisfying environment. The result is an increased interest in communications products. New developments, such as cordless phones with a greater range, plain paper fax machines at a popular price and office accessories with softer contours and greater fashionability, will appear throughout the '90's. ■





## DETERGENT PHOSPHATES

### Part II: Automatic Dishwashing Detergents

Because they are used daily and they perform their tasks so well, automatic dishwashing detergents (ADD) are taken for granted. However, to manufacturers who are constantly improving products to keep up with consumer lifestyle needs, these products pose many technical challenges. A challenge facing the soap and detergent industry today is the continual evaluation of how much phosphate needs to be in these detergents. (See Cl. Facts, Jan/Feb '91, p.2)

The chemistry for ADDs is much more complex than that for hand dishwashing detergents because human hands are removed from the dishwashing process. The physical force of hand scrubbing has to be replaced by a dishwashing machine and the much gentler action of a stream of water. Considerations, such as variations in water temperatures, a variety of dishware materials - from fine china to heavily soiled cookware in the same load - and the effectiveness of the mechanical action of the dishwasher, are factored into the formula. In addition, the ADD must not cause corrosion of machine parts. Unlike hand dishwashing detergents, ADDs must be low to non-sudsing as suds cushion the mechanical cleaning action of the water and cause suds overflow from the dishwasher. Certain protein foods, such as eggs and milk create foam; the ADD must suppress this foam in order to allow the water to do its cleaning job.

What role does phosphate play in this picture? Phosphate keeps food soil particles suspended in the water after they are removed from dishes and prevents these particles from being redeposited on the cleaned dishes. This removes food deposits that harbor bacteria. Phosphate is vitally important in softening water so hard water minerals (primarily calcium and magnesium) won't interfere with cleaning and won't deposit on dish surfaces. Such residue would show up as unacceptable cloudiness on dishes and glassware. The acceptable level of residue left on dishes is much less than that for laundering. Residual food soil and water mineral films on dishes after dishwashing have been identified as a cause for public health and food spoilage concerns. In fact, the use of phosphate-containing ADDs has been shown to reduce bacteria count on glass and plastic surfaces.

In addition to a record of excellent performance, phosphate has an unsurpassed human safety record. It allows manufacturers to provide

performance without raising product alkalinity to unsafe levels. And, importantly, it is not affected by chlorine which is used in these detergents to aid in cleaning dried and baked-on food from dishes.

Water temperature is another important component of automatic dishwashing. Because of safety and energy conservation concerns, water temperature settings are being evaluated in some states. Water temperatures that are set too high pose a threat of scalding to institutional and industrial food service workers, as well as in homes, especially to children. In order for ADDs to perform adequately, water in the dishwasher should be at least 130°F, so water heaters need to be set at 140°F to allow for heat loss through the plumbing system. Dishwasher water temperatures below 120° do not allow for adequate removal of soils, particularly fatty soils. The lower the temperature, the more phosphate is required to achieve adequate cleaning. If water temperature is regulated to lower temperatures, the need for phosphate will become even more critical.

The amount of phosphate (expressed as phosphorus) used in ADDs has decreased in the last 10 years from about 14 - 16% by weight to 8.7% or less today. The newest automatic dishwashing products, liquids, are denser than the powders and, therefore, can contain a lower percent of phosphate by weight. However, they still deliver similar amounts of phosphate to the dishwasher during each use. Detergent is measured by the volume of the dishwasher dispenser cup. Powders and liquids contain similar amounts of phosphate on this volume basis. To date, no state has banned phosphate use in ADDs and, where regulated, the amount of phosphate allowed is generally 8.7% or more.

At the present time, scientists have not been able to find an acceptable replacement for phosphate in ADDs, and the acceptable performance of dishwashers continues to require phosphate-based detergents. A phosphate substitute must not only be effective at a reasonable cost, it must be safe for home use, safe to crawling infants who can get detergent out of dishwashing dispensers (if doors are left open), and safe for the environment. Satisfying these objectives makes the job difficult. Current research is focusing on organic builders, polymers, enzymes and oxygen bleaching systems.

The soap and detergent industry will continue to search for alternatives to phosphates. However, any legislation that would arbitrarily force unrealistic limits on phosphates in automatic dishwashing products is not in the public interest. ■

## CONQUERING CLUTTER

### Faster, Easier Cleaning

A house that's full of clutter won't look clean even if all is spotless underneath. And, even the most routine housekeeping chores will take longer if everything is in disorder. The Soap and Detergent Association offers some tips for conquering clutter:

- Take advantage of the hidden spaces in the home. Utilize under-the-bed areas with boxes or storage drawers. For easy access, choose ones on castors. Don't forget the back of closet doors. They're perfect for shoe bags or wire grid systems with hooks for hanging small items like belts.
- Stack newspapers and other recyclable paper so they're easy to remove. Tie 2 eight-foot lengths of twine together at their centers. Then, place the knotted twine at the center of a large plastic container that's slightly larger than the folded newspapers. Drape the ends of the twine over the top of the container. Daily, deposit newspapers into the bin. Once the container is full, it's easy to tie the bundle and remove it in one neat stack.
- Routine cleaning will be easier if basic cleaning supplies are available on each floor, including the basement. Keep the supplies together in a portable container; several types are specially sized to hold cleaning supplies. Having specific cleaners available for special cleaning jobs (glass, wood, brass, metal, etc.), will eliminate a special trip to the store and allow cleaning to be done right "on the spot".
- Pewter and silver ashtrays will be easier to clean if sprayed or wiped first with furniture polish. ■

## ENERGY-EFFICIENT APPLIANCES

### Tips for Getting Your Money's Worth

Today, energy efficiency features rank right up there with dependability and convenience when shopping for major appliances—and rightly so. Considering that the payments for energy use will continue for the life of the appliance, an appliance's energy use becomes a family budget consideration as well as an environmental concern.

Manufacturers have made great strides in meeting consumers' needs for energy efficiency. Compared to similar 1972 appliances, 1989 models showed energy efficiency improvements by +53% for washers, +54% for dishwashers and +102% for refrigerators.

Many major appliance manufacturers now assist consumers by providing Energy Guide Labels to compare energy efficiencies. These labels give an estimated yearly cost of operation. In the U.S., they

are found on washers, dishwashers, refrigerators, refrigerator/freezers, water heaters, room air conditioners and furnaces. Because there is little difference among competing brands, clothes dryers, ranges and ovens are exempt from labeling. When shopping for energy efficiency in washers, be sure to compare models with similar features and look for some of the following energy-saving features.

**Total Water Usage.** Because of the way different models are constructed, there can be quite a variation in total water usage for each water level. Check the product literature to determine total water usage for each model.

**Water Level Controls.** Look for models that offer a variety of water level settings. The water usage of a "small" setting can be up to 75% less than the "extra large" setting. Always set the water level to correspond to the load size. Washing a small load on the "large" setting is a waste of water and energy. However, using too little water for the load size may result in poor results and could require rewashing—neither time nor energy efficient.

**Cold Water Rinses.** Use a cold water rinse for every load for consistent energy savings. Rinsed water temperature has no effect on the cleaning process.

**Wash Water Temperature.** Cold water washing will save energy, but cleaning results may not be acceptable. Detergents clean better in warm or hot water. It's better not to use wash water temperatures lower than 80°F. Use cold water for washing lightly soiled or brightly colored items, most washable woolens and if shrinkage is a concern. Hot water is recommended for washing white fabrics, heavily soiled items, diapers, or if there is illness in the family.

**Automatic Presoak.** Pretreating stains and presoaking heavily soiled items can make warm wash water temperatures more effective. To avoid using hot water, some washers have an automatic presoak cycle which advances from the presoak cycle into the regular wash cycle. The clothes soak and wash in the same water. Use a presoak product or extra detergent in the presoak cycle, following the washer manufacturer's instructions for amounts to use.

**Built-in Suds Saver.** This allows the user to save the wash water to use in the next loads. The maker of one model claims a savings of 32 gallons of water for every 3 loads. It's important to follow the manufacturer's instructions for sequence of loads and detergent amount. For best results, start with whites, then wash lightly soiled, light-colored items and end with heavily soiled and/or dark-colored items. ■





## LINENS AND LACE

### Adding Charm to A Space

Fine linens and lace were once the province of only the very wealthy. But today everyone can enjoy the poetry, the drama and the elegance of these gentle and beautiful textiles. New lace is easily available and vintage versions still abound—at prices that still make them affordable. The Soap and Detergent Association offers some suggestions for decorating with lace.

Whether used sparingly or in lavish profusion, lace will soften any decor. In the bedroom nothing can replace the luxurious feel of fine linen bed fashions. Sheets, pillowcases, comforters, bed hangings and boudoir pillows trimmed in lace provide an intimate setting that relaxes the body and soothes the spirit. Today's all-cotton, 200-thread-count percale sheets with no-iron finishes often possess a beauty that belies their durability. Decorator details, such as fagoting, embroidery, ruffles, and delicate edgings, are inspired by vintage textiles. Strips of old lace can easily be recycled by stitching them onto plain sheets. Use narrow strips for bands or edgings; use wider strips to convert the border of a top sheet into a turned-down cuff.

The bathroom, too, can benefit from a touch of lace. A gossamer lace panel, backed by a liner, makes a wonderful shower curtain. A conventional printed or plain shower curtain can be softened by adding a lace overlay. Towel racks or open shelves can be used to display collections of hand towels with delicate trims.

Tables set with lace-trimmed linens have a romantic appeal. For an artful look, mix and match new and vintage linens. To create an elegant table collage, overlap runners and cloths of varying sizes. Or, consider layering dissimilar shapes, such as a small round cloth atop a large rectangle, or a small square positioned diagonally over a larger one.

Due to the effects of sunlight and frequent launderings in their own lifetime, vintage lace curtains are rare. Tablecloths and lace mats, whether new or old, often find new life as a window treatment. Or, new lace can substitute for old to re-create that period look.

Small antiques and collectibles, whether displayed on open shelves or stored in glass-front cabinets, can be enhanced with lace. Use lace trims, in varying motifs, along the edge of each shelf. Or, position doilies, handkerchiefs and other odd bits of lace so they dip invitingly over the edge. ■

## MISCELLANY

### Water Heater Gas Build-up

When returning from a vacation of two weeks or more, turn on the hot water faucets and let the water run for about two minutes before using the dishwasher or washing machine. Be sure to extinguish any open flame or smoking materials before running the water.

This safety precaution prevents the possibility of an explosion caused by hydrogen gas build-up. The Soap and Detergent Association explains that the home's hot water system produces this gas as a result of a chemical reaction between the water and the corrosive protection devise in the water heater. During normal use, this gas escapes in small, safe amounts. However, if the hot water is not used for an extended period of time, this gas can accumulate in the hot water heater even if the water is turned off.

### Getting the Scoop on Ice Cream

Ice cream scoops run the gamut, from the utilitarian to the whimsical. Those who want to scoop up their ice cream like the pros can now purchase the same scoop used by a chain of ice cream parlors. This "pro" scoop is made of durable aluminum with a stainless steel spring that can be removed for thorough cleaning.

Another comes with its own heating unit so dishing up ice cream is easy as pie. For the light-hearted ice cream lover, adds The Soap and Detergent Association, there is the penguin scoop. It comes in black, pink or blue tuxedo design, complete with tails, and can stand on its own penguin feet.

### Wedding Gown Storage

To preserve that precious wedding gown, The Soap and Detergent Association offers some advice.

Stains left in the gown can cause discoloration and possible fabric damage so have the gown cleaned professionally. Take it to a professional who can supply you with an acid-free storage box.

Plastic bags or boxes with plastic windows should not be used because the moisture trapped by the plastic may ultimately cause mildew. Using white, acid-free tissue paper, stuff the sleeves and bodice of the gown; pad folds carefully to prevent creasing.

Foam padding, metal buttons or metallic trim should be removed and stored separately. After packing, the box should be stored in a dark, cool, dry place. Avoid hot attics and damp basements.

### Hosiery That Lasts

Stocking up on stockings can get expensive. To help consumers get their money's worth, The Soap and Detergent Association offers some tips.

Opaque hose are both fashionable and practical. Their heavier weight makes them resistant to snags or runs. When it comes to sheer hose, styles that contain Lycra provide a close fit that decreases the possibility of sags and snags. Since most runs start in the toes, reinforced toes are another good idea.

To protect hosiery from long nails or sharp jewelry, slip on a pair of cotton gloves before pulling on the hose. While hand washing with a toilet bar, a soap bar or a light duty detergent is the preferred laundering method, machine washing using a delicate cycle is an option. Just be sure to protect the hose with a lingerie bag or zip-up pillowcase, and always line dry.

### High Style Hardware

Consumers who are looking for a quick facelift for doors, drawers and light switch plates will welcome a new line of hardware fixtures. Old stand-by styles, such as the coat-and-hat hook, the rubber-tipped doorstop and the rectangular switch plate have been revitalized with a variety of new finishes. The hardware line also includes doorknobs and drawer pulls.

The traditional styles come in non-traditional colors. Offerings include an industrial finish in slick primary shades of red, blue, yellow and green, a textured finish in black, red, blue and gray, and a speckled granite finish. They are being sold in houseware departments and home organization areas.

### Nail Care

More and more working women, particularly those who live in larger metropolitan areas, are indulging themselves in the small luxury of a weekly professional manicure. As a result, reports The Soap and Detergent Association, personal care vendors are offering manicure kits, polish removers and nail care products that can be used for touch-ups between visits to the salon.

Battery-operated nail care systems buff, remove cuticles, shape and file nails. Some are small enough to fit in a purse. Another innovation is an electric hand mitt designed to condition and nourish hands and nails. All of these products are designed to re-create the pampering women receive in the professional salons. ■

### WHAT'S NEW?

Steamers are gaining in popularity, particularly among health-conscious cooks. The Steam Cuisine will be welcomed by busy cooks and families with varying food likes and dislikes. With three stackable compartments, consumers can steam several types of food simultaneously. Other features include a see-through lid and a removable tray at the base of the unit for capturing juices and other liquids for use in sauces or gravies. (Metal Ware Corp.; 1700 Monroe Street; Two Rivers, WI 54241)

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Keep dips, fondues and sauces at just the right temperature for hours. The Little Dipper Electric Stoneware Server has a sixteen-ounce stoneware bowl that measures 5" wide and 4" high. The case is embellished with a Southwest pattern and is accompanied by an easy-grip plastic cover. (Rival Manufacturing Co.; 36th and Bennington; Kansas City, MO 64129)

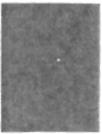
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A line of insulated serveware, including fourteen-ounce and twenty-ounce glasses, a pitcher, ice bucket, wine bottle cooler and salad bowl, is designed to keep contents cooler longer and prevent the sweating and dripping that harms wooden tables and delicate cloths. The double-walled, insulation process used to create Therma Ware is similar to the one used for thermal vacuum carafes. (A.K. Das Company, Inc.; 1809 Orangethorpe Park; Anaheim, CA 92801)

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Inspired by the safety plug required on all new hair dryers, the Power Guard line of outlets and plugs can be used on all household appliances. These electric shock prevention units are available in single and triple outlets, multi-outlet power strips, an indoor/outdoor outlet and a replacement plug. The multi-outlet strip has a surge suppressor to protect stereos, VCR's, CD players and computers from power surges and electrical faults. (Windmere Corp.; 5980 Miami Lakes Drive; Miami Lakes, FL 33014) ■





## "KEEP IT CLEAN" BRIEFS

Outdoor work and play pose laundry challenges. Here are tips on fighting summertime stains:

Ice Cream: Pretreat or soak the stain using a product containing enzymes. Soak for about 30 minutes for fresh stains or several hours for older stains, then launder the garment as usual.

Grass: Pretreat or soak in warm water and a product containing enzymes. Soak for about 4 hours, keeping the garment submerged in the water (place a white towel on top of it, if necessary). Launder, using a detergent containing enzymes and a bleach that is safe for the fabric.

Mildew: Launder the garment in chlorine bleach, if it is safe for the fabric. If not, soak in an oxygen bleach and hot water and launder in the hottest water safe for fabric. Badly mildewed fabrics may be damaged beyond repair.

Mud: Let the mud dry, then brush it off. Rinse under cold water, then pretreat with a paste of powdered detergent and water or a liquid laundry detergent. Let set for a few minutes, then launder.

A study completed by dermatologists states that one reason for fingernails becoming brittle is letting them constantly get wet and dry. The study found that it's not the soaking in water or the detergent that increases the nail damage.

It's time to store away those electric blankets for the summer. Most fabrics used for these blankets are washable, although always check the manufacturer's care label for specific instructions. Most electric blankets can be washed using a gentle or delicate cycle to minimize action on the wiring. Warm water temperature is usually recommended for lightly to medium soiled blankets. Some blankets can be tumble dried using a low heat setting. Some specify line drying only. Handle them as carefully as possible to avoid breaking the wiring.

Scrub outdoor furniture with soap or detergent suds before painting. A clean surface is a prerequisite to a good and lasting paint job. A new paint job will last longer if dust and mud splashes are cleaned off with soap or detergent suds at regular intervals. ■

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