



GETTING PERSONAL WITH CHEMICALS

A Consumer Guide to 10 Common Personal Care Products Containing Chemicals of Concern

U.S. PIRG
Education Fund

Getting Personal with Chemicals:

A Consumer Guide to 10 Popular Personal Care Products Containing Toxic Chemicals

U.S. PIRG Education Fund

Written by:


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The authors bear responsibility for any factual errors. Policy recommendations are those of U.S. PIRG Education Fund. The views expressed in this guide are those of the authors and do not necessarily reflect the views of our funders or those who provided review.

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Cover: Anna Low-Beer

INTRODUCTION

We should be able to trust that the products we buy are safe — especially the ones our families use every day, directly on our bodies.

However, we looked into common ingredients in popular personal care products, and found that when we use these products, like shampoo, baby wipes, deodorant, shaving gel, or perfume, we are often dosing our bodies with chemicals that can disrupt our hormones, cause developmental problems, cause cancer, and more.

Most people are troubled when they learn that manufacturers can put almost anything they want in the personal care products that we use on our bodies every day. The Food and Drug Administration (FDA) does not have the power to require safety testing or approval before these products hit store shelves, so manufacturers have the responsibility to make sure these products are safe.

Consumers are increasingly demanding safe, non-toxic products, and U.S. PIRG Education Fund is working to convince personal care product manufacturers to remove toxic chemicals from their products, and to disclose the chemical ingredients they use to create fragrances in their products, which are currently kept secret.

This consumer guide describes the results of our investigation of 10 popular personal care products that contain chemicals of concern. Chemicals of concern are chemicals linked to negative health effects by peer-reviewed studies or government research. The fact that personal care products contain chemicals of concern does not necessarily mean they violate the law. This consumer guide also describes 10 safer alternative products that do not contain these chemicals of concern.

We can't definitively say that any particular product is 100% safe for all users. We chose to highlight the safer products because they are formulated without major chemicals of concern that are found in many personal care products. Of course, in addition to the toxic concerns that we are raising, it's possible for people to be allergic to particular ingredients, or have other kinds of sensitivities depending on genetic or environmental factors. It's best to look for products with low-hazard ingredients, like the ones we highlight on our list.

PRODUCTS CONTAINING CHEMICALS OF CONCERN

SHAMPOOS AND CONDITIONERS

1. Garnier Fructis Fortifying Shampoo Damage Eraser (L'Oréal)



Sodium Laureth Sulfate

This ingredient can be contaminated with 1,4-dioxane,¹ which is a byproduct created in the process of making the ingredient less harsh for the skin. 1,4-dioxane is most often found in products that foam or suds, like shampoo and body wash. The U.S. EPA considers 1,4-dioxane a likely human carcinogen.²

Fragrance

The ingredient "fragrance" or "parfum" refers to a mixture of scent chemicals and ingredients that are not disclosed.⁴ According to the International Fragrance Association (IFRA) approximately 3,000 chemicals can be used to make fragrance,¹³ some of which are linked to cancer,⁵ reproductive and respiratory problems,⁶ and allergies.⁷

PPG-5-ceteth-20

This ingredient can be contaminated with 1,4-dioxane,⁸ which is a byproduct created in the process of making the ingredient less harsh for the skin. 1,4-dioxane is most often found in products that foam or suds, like shampoo and body wash. The U.S. EPA considers 1,4-dioxane a likely human carcinogen.²



2. Aveda Color Conserve Shampoo (Estée Lauder)

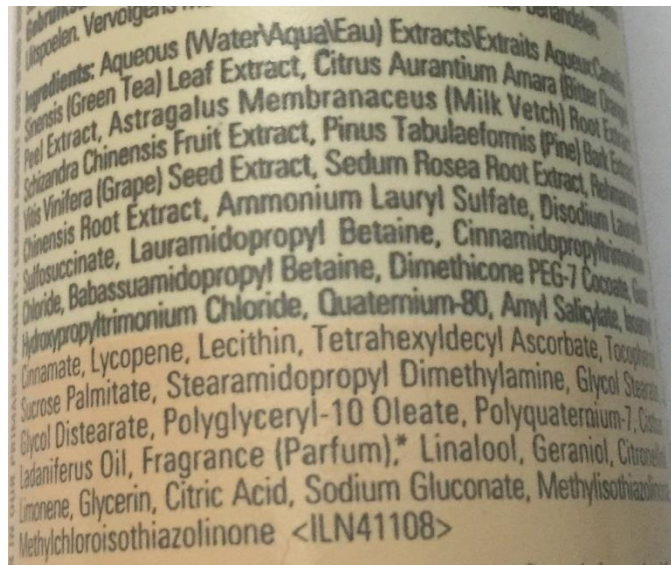


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PEG Compounds

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3. Suave Kids Coconut Smoothers Shampoo + Conditioner (Unilever)



Sodium Laureth Sulfate

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SOAP

4. Dial Gold Antibacterial Bar Soap (Henkel)



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Inactive ingredients: soap (sodium cocoate*, sodium palm kernelate*, sodium palmate*, sodium tallowate*), water, talc, coconut acid*, palm acid*, tallow acid*, palm kernel acid*, PEG 6 methyl ether, fragrance, glycerin, sorbitol, sodium chloride, pentasodium pentetate, tetrasodium etidronate, yellow 5, yellow 8, red 4
*contains one or more of these ingredients

MOISTURIZER

5. Neutrogena Oil-Free Moisture–Sensitive Skin (Johnson & Johnson)*



Diazolidinyl Urea

This is a preservative that can release formaldehyde,³ which is a known carcinogen.²²

Ethylparaben

This is a preservative that has been linked to hormone disruption.^{15, 17}

Methylparaben

This is a preservative that has been linked to skin cancer¹⁵ and hormone disruption.^{15, 17}

Propylparaben

This is a preservative that has been linked to reproductive toxicity¹⁶ and hormone disruption.^{15, 17}

PEG Compounds

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* Due to consumer demand, the marketplace has begun to move away from toxic chemicals. Johnson & Johnson has started to respond to consumer demand by removing some chemicals of concern from their products, like removing formaldehyde-releasing preservatives from their baby shampoo. We commend them for these changes. However, even leading manufacturers like Johnson & Johnson have much more to do to ensure transparency and safety of all ingredients in their products.

Ingredients: Water, Glycerin, Ethylhexyl Palmitate, Dimethicone, Petrolatum, Cyclomethicone, Soybean (Glycine Soja) Sterols, Isopropyl Isostearate, Cetyl Alcohol, PEG-10 Soy Sterol, Glyceryl Stearate, PEG-100 Stearate, C12-15 Alkyl Benzoate, Carbomer, Tetrasodium EDTA, Sodium Hydroxide, Diazolidinyl Urea, Ethylparaben, Methylparaben, Propylparaben.

DEODORANT

6. Degree Men Extra Fresh Sport Defense Deodorant (Unilever)



Fragrance

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INGREDIENTS: DIPROPYLENE GLYCOL, WATER (AQUA), PROPYLENE GLYCOL, SODIUM STEARATE, POLOXAMINE 1307, FRAGRANCE (PARFUM), SIMETHICONE, DISODIUM EDTA, BHT, AMINO-METHYL PROPANOL, GREEN 3 (CI 42053).

SHAVING CREAMS

7. Skintimate SkinTherapy Shave Gel Lotionized (Edgewell)



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Triethanolamine

We advise that people avoid TEA because it forms a cancer-causing chemical when it interacts with certain other chemicals in a product. This cancer-causing chemical is called nitrosamine,¹² which forms when TEA interacts with chemicals that contain or produce nitrogen.²³ It can be difficult for consumers to know whether TEA will interact with any of the laundry list of other chemicals on the label of a product—not to mention unknown interactions with the hidden chemicals in the ingredient “fragrance”¹³—so it makes the most sense to avoid taking the risk of exposure to TEA.

PEG Compounds

This ingredient can be contaminated with 1,4-dioxane,¹⁴ which is a byproduct created in the process of making the ingredient less harsh for the skin. 1,4-dioxane is most often found in products that foam or suds, like shampoo and body wash. The U.S. EPA considers 1,4-dioxane a likely human carcinogen.²

INGREDIENTS / INGRÉDIANTS : WATER / EAU, PALMITIC ACID, TRIETHANOLAMINE, SUNFLOWER SEED OIL GLYCERIDE, ISOPENTANE, SORBITOL, STEARIC ACID, ISOBUTANE, LANOLIN ALCOHOL, PVP, TOCOPHERYL ACETATE, PEG-90M, HYDROGENATED VEGETABLE OIL, OLEA EUROPAEA (OLIVE) FRUIT OIL, FRAGRANCE / PARFUM, TITANIUM DIOXIDE, RED 40.



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INGREDIENTS / INGRÉDIENTS : WATER / EAU,
PALMITIC ACID, TRIETHANOLAMINE, SUNFLOWER SEED
OIL GLYCERIDE, ISOPENTANE, SORBITOL, STEARIC
ACID, ISOBUTANE, PVP, FRAGRANCE / PARFUM,
PEG-90M, ALOE BARBADENSIS LEAF JUICE, BLUE 1.

BABY WIPES

9. Pampers Baby Fresh Baby Wipes (Procter & Gamble)



Fragrance

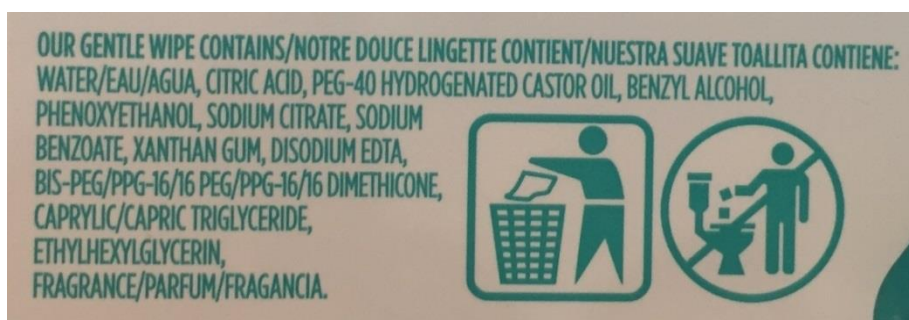
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Phenoxyethanol

Preservative that has been linked to nervous system problems in infants exposed orally,²⁰ and also allergic reactions,¹⁸ and eczema.¹⁹

PEG Compounds

This ingredient can be contaminated with 1,4-dioxane,¹⁴ which is a byproduct created in the process of making the ingredient less harsh for the skin. 1,4-dioxane is most often found in products that foam or suds, like shampoo and body wash. The U.S. EPA considers 1,4-dioxane a likely human carcinogen.²



PERFUME & COLOGNE

A major problem with perfumes and colognes is that the full ingredients are not disclosed at all, and ingredient labels are not mandatory. The Campaign for Safe Cosmetics and the Environmental Working Group did a study on several perfumes and colognes, and found that Calvin Klein ETERNITY for both men and women contained the toxic chemicals diethyl phthalate and galaxolide,¹² even though those chemicals are not listed on the ingredients label.

Below, you will see that some ingredients are listed, but where you see “Parfum/Fragrance,” that ingredient is a catch-all for an undisclosed mixture of chemicals used to create a scent.

10. Calvin Klein ETERNITY for Women and Men (Coty)



INGREDIENTS: ALCOHOL DENAT., PARFUM/FRAGRANCE, AQUA/WATER/EAU, BENZYL SALICYLATE, BUTYLPHENYL METHYLPROPIONAL, CITRONELLOL, EUGENOL, LINALOOL, ETHYLHEXYL METHOXYCINNAMATE, HYDROXYCITRONELLAL, BENZOPHENONE-3, ETHYLHEXYL SALICYLATE, BUTYLMETHOXYDIBENZOYLMETHANE, HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXYALDEHYDE, GERANIOL, ISOEUGENOL, CINNAMYL ALCOHOL, LIMONENE, BHT, PROPYLENE GLYCOL, BENZYL ALCOHOL, BENZYL BENZOATE, ACRYLATES/OCTYLACRYLAMIDE COPOLYMER, HYDROLYZED JOJOBA ESTERS, FD&C YELLOW NO. 5 (CI 19140), FD&C RED NO. 4 (CI 14700).

Diethyl Phthalate

Has been linked to reproductive system problems, including sperm damage.¹⁰

Galaxolide

Studies indicate that it interferes with both male and female hormones.⁹

Fragrance

The ingredient “fragrance” or “parfum” refers to a mixture of scent chemicals and ingredients that are not disclosed.⁴ According to the International Fragrance Association (IFRA) approximately 3,000 chemicals can be used to make fragrance,¹³ some of which are linked to cancer,⁵ reproductive and respiratory problems,⁶ and allergies.⁷



INGREDIENTS: ALCOHOL DENAT., AQUA/WATER/EAU, PARFUM/FRAGRANCE, LINALOOL, LIMONENE, ETHYLHEXYL METHOXYCINNAMATE, CITRONELLOL, GERANIOL, EVERNIA FURFURACEA (TREEMOSS) EXTRACT, COUMARIN, BUTYLPHENYL METHYLPROPIONAL, PROPYLENE GLYCOL, BUTYL METHOXYDIBENZOYLMETHANE, ETHYLHEXYL SALICYLATE, BENZYL ALCOHOL, CITRAL, HYDROXYCITRONELLAL, BHT, ACRYLATES/OCTYLACRYLAMIDE COPOLYMER, HYDROLYZED JOJOBA ESTERS, FD&C YELLOW NO. 5 (CI 19140), D&C GREEN NO. 5 (CI 61570), FD&C YELLOW NO. 6 (CI 15985).

Safer Alternative Personal Care Products

Below is a list of alternative personal care products that are formulated without major chemicals of concern found in many personal care products. U.S. PIRG Education Fund can't definitively say that any particular product is 100% safe for all users. We chose to highlight these products because they are formulated without major chemicals of concern that are found in many personal care products. Of course, in addition to the toxic concerns that we are raising, it's possible for people to be allergic to particular ingredients, or have other kinds of sensitivities depending on genetic or environmental factors. It's best to look for products with low-hazard ingredients, like the ones we highlight on our list.

SHAMPOOS AND CONDITIONERS

Honest Shampoo + Body Wash (Honest Company)



INGREDIENTS: WATER (AQUA, EAU), COCAMIDOPROPYL HYDROXYSULTAINE, SODIUM LAURYL GLUCOSIDES HYDROXYPROPYLSULFONATE, SODIUM METHYL COCOYL TAURATE, LEUCONOSTOC/RADISH ROOT FERMENT FILTRATE, SODIUM CHLORIDE, SODIUM LAURYL GLUCOSE CARBOXYLATE, LAVANDULA HYBRIDA OIL, LAVANDULA ANGUSTIFOLIA (LAVENDER) OIL, VANILLIN, CALENDULA OFFICINALIS FLOWER EXTRACT*, CHAMOMILLA RECUTITA (MATRICARIA) FLOWER EXTRACT*, ALCE BARBADENSIS LEAF JUICE*, GLYCERIN, HYDROLYZED JOJOBA PROTEIN, CHENOPODIUM QUINOA SEED EXTRACT, COCOS NUCIFERA (COCONUT) OIL*, LAURYL GLUCOSIDE, CAPRYLYL GLYCOL, BETAINE, TRIETHYL CITRATE, GUAR HYDROXYPROPYLTRIMONIUM CHLORIDE, COCONUT ACID, SODIUM CITRATE, MALTOL, GAMMA-NONALACTONE, CAPRYLHYDROXAMIC ACID, DISODIUM COCO-GLUCOSIDE CITRATE, CITRIC ACID. *ORGANIC INGREDIENT

John Masters Organics Zinc & Sage Shampoo with Conditioner Wash (John Masters)



Ingredients: Aloe barbadensis (aloe vera) leaf juice,* aqua (water), babassuamidopropyl betaine, decyl glucoside, disodium cocoamphodiacetate, glycerin, zinc gluconate, zinc pyrithione, rosmarinus officinalis (rosemary) leaf extract,* urtica dioica (nettle) root extract,* chamomilla recutita (chamomile) flower extract,* salvia officinalis (sage) leaf extract,* equisetum hyemale (horsetail) extract,* lavandula angustifolia (lavender) extract,* salix alba (willow) bark extract,* carica papaya (papaya) fruit extract, yucca schidigera (yucca) leaf/root/stem extract,* panthenol (vitamin B5), allantoin, wheat amino acids, chlorophyll, riboflavin, sodium benzoate, potassium sorbate, vanilla planifolia (bourbon vanilla) fruit oil,* rosmarinus officinalis (rosemary) leaf oil,* salvia officinalis (sage) oil,* simmondsia chinensis (jojoba) seed oil

* Certified Organic

No GMOs, parabens, DEAs, MEAs, TEAs, sodium laurel sulfate, artificial color, artificial fragrance

SOAP

Tom's of Maine Natural Beauty Bar Sensitive (Colgate-Palmolive)



INGREDIENTS: sodium palmate,* sodium cocoate or sodium palm kernelate, water, glycerin, sodium gluconate, sodium chloride, *Olea europaea* (olive) fruit oil, *Simmondsia chinensis* (jojoba) seed oil, tocopheryl acetate (vitamin E acetate), *Anthemis nobilis* flower oil

*Rainforest Alliance Certified™

MOISTURIZER

Honest Face + Body Lotion (The Honest Company)

INGREDIENTS: WATER (AQUA, EAU), CAPRYLIC/CAPRIC TRIGLYCERIDE, BUTYROSPERMUM PARKII (SHEA) BUTTER*, CETEARYL ALCOHOL, GLYCERYL STEARATE, GLYCERIN, CETEARYL OLIVATE, SORBITAN OLIVATE, LAVANDULA ANGLUSTIFOLIA (LAVENDER) OIL, LAVANDULA HYBRIDA (LAVANDIN) OIL, CARTHAMUS TINCTORIUS (SAFFLOWER) SEED OIL*, OENOTHERA BIENNIS (EVENING PRIMROSE) OIL*, OLEA EUROPAEA (OLIVE) FRUIT OIL*, SIMMONDSIA CHINENSIS (JOJOBA) SEED OIL*, CALENDULA OFFICINALIS FLOWER EXTRACT*, CHAMOMILLA RECUTITA (MATRICARIA) FLOWER EXTRACT*, ALOE BARBADENSIS LEAF JUICE, TRIETHYL CITRATE, SODIUM NITRATE, GAMMA-NONALACTONE, MALTOL, CAPRYLHYDROXAMIC ACID, HYDROXYETHYLCELLULOSE, XANTHAN GUM, CAPRYLYL GLYCOL

*ORGANIC INGREDIENT



DEODORANT

Honest Deodorant – Lavender Vanilla (The Honest Company)



INGREDIENTS: ALCOHOL DENAT*, WATER/AQUA, HAMAMELIS VIRGINIANA (WITCH HAZEL) LEAF WATER*, POLYGLYCERYL-4 OLEATE, SODIUM GLUTAMATE, ALOE BARBADENSIS (ALOE VERA) LEAF JUICE*, EUCALYPTUS GLOBULUS LEAF OIL*, VANILLA PLANIFOLIA FRUIT OIL*, ANTHEMIS NOBILIS (ROMAN CHAMOMILE) FLOWER OIL*, MELALEUCA ALTERNIFOLIA (TEA TREE) LEAF OIL*, CITRUS LIMON FRUIT OIL*, SALVIA OFFICINALIS (SAGE) OIL*, CALENDULA OFFICINALIS (POT MARIGOLD) FLOWER EXTRACT*, CHAMOMILLA MATHUSIENSIS (MATRICARIA) FLOWER EXTRACT*, GLYCERIN*, LAVANDULA ANGSTIFOLIA (LAVANDER) OIL* *CERTIFIED ORGANIC INGREDIENT

SHAVING CREAM

John Masters Organics Men Eucalyptus & Agave 2-in-1 Face Wash & Shave Foam (John Masters)

Ingredients: Aloe barbadensis (aloe vera) leaf juice*, hamamelis virginiana (witch hazel) leaf water*, sodium cocoyl glutamate, hamamelis virginiana (witch hazel) leaf water*, alcohol*, glycerin*, leuconostoc/radish root ferment filtrate, lavandula angustifolia (lavender) flower water*, sodium glutamate, opuntia ficus-indica (prickly pear) stem extract*, saccharomyces/agave americana leaf ferment filtrate*, salvia officinalis (sage) bark extract, oryza sativa (rice) seed extract*, camellia sinensis (white tea) leaf extract*, centella asiatica (gotu kola) root extract, chlorella platensis (algae) extract*, sodium levulinate, lavender oil*, lavandula (lavandin) flower oil*, eucalyptus radiata (eucalyptus) leaf oil*, potassium sorbate, citric acid

* Certified Organic Ingredient



BABY WIPES

Seventh Generation Free and Clear Baby Wipes (Seventh Generation)



WHAT'S INSIDE OUR SAFE & EFFECTIVE WIPES	
Water	
Cocamidopropyl pg-dimonium chloride phosphate	<i>plant-based cleaning agent</i>
Citric acid	<i>plant-derived pH adjuster</i>
Quillaja saponaria wood extract	<i>plant-derived cleaning agent</i>
Aloe barbadensis leaf extract	<i>plant-derived skin conditioner</i>
Tocopheryl acetate (Vitamin E)	<i>synthetic skin softener</i>
Sodium benzoate	<i>synthetic preservative</i>
Soft Wipe Material:	
Wood pulp, Polyethylene, Polypropylene	
<i>Learn more at seventhgeneration.com</i>	

PERFUME & COLOGNE

At this time, we cannot recommend a safer perfume or cologne, because the ingredients in fragrance are not required to be disclosed. This means manufacturers can use any of approximately 3,000 chemicals to create their scents, some of which are linked to cancer, reproductive and respiratory problems, and allergies.

The only way to evaluate whether perfumes and colognes are safe for use is for manufacturers to disclose 100% of the ingredients in their products. Because we don't know what's in these products, we can't say whether they are safe or not.

TIPS FOR CONSUMERS

U.S. PIRG Education Fund recommends the following for consumers:

- Check the ingredients list on the products at the store before you buy them and make sure they don't include any of the chemicals of concern in our guide. Be on the lookout for common ingredients that have been linked to negative health effects like parabens, PEG compounds, fragrance, and more.
- If you see chemicals of concern in the ingredients of your favorite products, contact the product company's customer service department and tell them you want them to remove toxic ingredients from their products. You can find the customer service phone number or email on the company's website.
- Consider buying the safer alternative products we list in our guide, and go to www.uspirgedfund.org to see our list of products that contain chemicals of concern, and safer products. This list will be continually updated over time, so you can check back often to see new examples of products to avoid, and safer alternative products.

METHODOLOGY

U.S. PIRG Education Fund researchers looked at the ingredients of each product either on the product website or on a retailer's website which lists all the ingredients, then confirmed the ingredients on the product packaging. We then researched each ingredient, first by searching for the ingredient in the Environmental Working Group Skin Deep database, then by reviewing the peer-reviewed and government studies cited for that ingredient.

We chose to highlight in this guide the ingredients we found that have most commonly been linked to negative health effects by peer-reviewed studies or government research. We decided on these products based on our staff's market research, and anecdotal research based on talking to regular consumers about which personal care products they use, and which brands they recognize. This is not an exhaustive list of chemicals of concern, or products that contain chemicals of concern, but rather a sample of common, popular products that consumers can expect to find when they shop at a grocery store, drug store, or on common retailer websites.

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