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

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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)

Fragrance

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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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**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

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4. Dial Gold Antibacterial Bar Soap (Henkel)

**Fragrance**

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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diazolidinyl Urea</td>
<td>This is a preservative that can release formaldehyde, which is a known carcinogen.</td>
</tr>
<tr>
<td>Ethylparaben</td>
<td>This is a preservative that has been linked to hormone disruption.</td>
</tr>
<tr>
<td>Methylparaben</td>
<td>This is a preservative that has been linked to skin cancer and hormone disruption.</td>
</tr>
<tr>
<td>Propylparaben</td>
<td>This is a preservative that has been linked to reproductive toxicity and hormone disruption.</td>
</tr>
<tr>
<td>PEG Compounds</td>
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</tr>
</tbody>
</table>

* 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, Glycerol 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

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

7. Skintimate SkinTherapy Shave Gel Lotionized (Edgewell)

Fragrance
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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, which forms when TEA interacts with chemicals that contain or produce nitrogen. 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”—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, 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.
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**PEG Compounds**

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**BABY WIPES**

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

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**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.\(^19\)

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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, 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)

<table>
<thead>
<tr>
<th>Diethyl Phthalate</th>
<th>Has been linked to reproductive system problems, including sperm damage.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Galaxolide</td>
<td>Studies indicate that it interferes with both male and female hormones.</td>
</tr>
</tbody>
</table>

| Fragrance         | The ingredient “fragrance” or “parfum” refers to a mixture of scent chemicals and ingredients that are not disclosed. According to the International Fragrance Association (IFRA) approximately 3,000 chemicals can be used to make fragrance, some of which are linked to cancer, reproductive and respiratory problems, and allergies. |
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)
John Masters Organics Zinc & Sage Shampoo with Conditioner Wash (John Masters)
**SOAP**

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

![Tom's of Maine Natural Beauty Bar Sensitive](image)

**MOISTURIZER**

Honest Face + Body Lotion (The Honest Company)

![Honest Face + Body Lotion](image)
DEODORANT

Honest Deodorant – Lavender Vanilla (The Honest Company)

SHAVING CREAM

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

Seventh Generation Free and Clear Baby Wipes (Seventh Generation)

![Image of Seventh Generation Free and Clear Baby Wipes]

**WHAT’S INSIDE OUR SAFE & EFFECTIVE WIPES**

- Water
- Cocamidopropyl pg-dimonium chloride phosphate
- Citric acid
- Quillaja saponaria wood extract
- Aloe barbadensis leaf extract
- Tocopheryl acetate (Vitamin E)
- Sodium benzolate
- Soft Wipe Material: Wood pulp, Polyethylene, Polypropylene

*Learn more at seventhgeneration.com*
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.

METHODODOLOGY

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.
REFERENCES

1. Sodium Laureth Sulfate

2. Sodium Laureth Sulfate, PEGs, PPG-5

3. Diazolidinyl Urea

4. Fragrance

5. Fragrance

6. Fragrance
   Citation: CDC. Acetaldehyde. NIOSH Pocket Guide to Chemical Hazards, 2015. Available at http://www.cdc.gov/niosh/npg/npgd0001.html
   See more at: http://www.safecosmetics.org/get-the-facts/chemicals-of-concern/fragrance/#_edn2

7. Fragrance

8. PPG-5-ceteth-20
9. **Galaxolide**  

10. **Diethyl Phthalate**  


12. **Trieth: nitrosamine leading to cancer**  

13. **Fragrance**  
**Citation:** IFRA. IFRA Ingredients, 2015. Available at http://www.ifraorg.org/en-us/ingredients#.VW-Cdc-6eUk.

14. **PEGs**  

15. **Propylparaben, Methylparaben, Ethylparaben**  
See more at: http://www.safecosmetics.org/get-the-facts/chemicals-of-concern/parabens/#_edn28

16. **Propylparaben**  
See more at: http://www.ewg.org/skindeep/ingredient/705335/PROPYLPARABEN/#

17. **Propylparaben, Methylparaben, Ethylparaben**  
EWG Ingredient Methylparaben, available at: http://www.ewg.org/skindeep/ingredient/703937/METHYLPARABEN/

18. Phenoxyethanol

19. Phenoxyethanol

20. Phenoxyethanol

21. Triethanolamine

22. Diazolidinyl Urea

23. Trieth: Ethanomines leading to nitrosamine