

# The Hidden Agents in Your Cosmetics That Threaten Your Skin and Your Health



## About

Dermonaturopath enthusiast, Mrs. Nathalie Forget ND.A., founder of Davincia®, has made it her mission to raise public awareness about the importance of the health and fertility of living beings as well as the planet. Convinced that the well-being of our planet directly influences our own health, she guides you towards informed and responsible choices. Through Davincia®, she promotes the use of safe and clean products designed to respect and preserve the health and fertility of all living beings as well as the overall well-being of the environment around us. Join Mrs. Forget in her commitment to fostering a healthier and more sustainable future for all.

## Introduction

You may potentially be causing more harm than good to your skin and health.

Sometimes we cause more damage to our skin when we use cosmetic products, even the most expensive ones can harm our skin and health. In our daily quest for beauty and care, we apply a variety of cosmetic products to our skin. But did you know that these products could contain potentially harmful substances for your health and the environment? This detailed guide explores the toxic agents present in cosmetics, the associated risks, and highlights healthy alternatives.

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## Daily Exposure to Cosmetic Products

How many cosmetic products do you use each day? On average, a woman applies a dozen different cosmetic products to her skin daily, exposing her skin to a multitude of chemical compounds. This includes products such as soap, shampoo, and day cream, thereby increasing the effects of cosmetic products on the skin.

## Role and Risks of Toxic Agents

Why do manufacturers use toxic agents?

Toxic agents serve various functions in cosmetics, such as preservatives, emollients, solvents, and texture agents, making them more appealing or extending their shelf life. Here's why these substances are so commonly integrated into cosmetic formulas:

- **Preservation and Extended Shelf Life**

Preservatives like parabens, formaldehyde, and formaldehyde-releasing agents are used to prevent the growth of microorganisms in cosmetic products.

- **Texture Improvement**

Substances like silicones (e.g., dimethicone) and certain types of alcohols (like fatty alcohols) are used to improve the texture of creams and lotions, making them silkier, easier to spread, and quickly absorbed by the skin.

- **Formula Stability**

Toxic agents such as emulsifiers and stabilizers (e.g., PEG and its derivatives) help maintain the uniformity of formulations, preventing the separation of oil- and water-based ingredients.

- **Product Effectiveness**

Some toxic agents, like sulfates in shampoos and cleansers, are used for their effectiveness in removing oil and dirt from the skin and hair. Although they can be irritating, their deep-cleaning ability is often valued in cleaning formulas.

- **Production Cost**

Using cheaper toxic agents helps reduce production costs. For companies aiming to maximize profits while offering products at competitive prices, the use of these substances can be economically advantageous, although it may compromise consumer safety.

- **Aesthetic and Sensory Appeal**

Fragrances and colorants, although potentially allergenic or toxic, are added to make products more attractive. They play a crucial role in the consumer's sensory experience, strongly influencing the perception and satisfaction of the product.

## Effects of Toxic Agents on Skin Flora

How do toxic agents affect your skin?

**Toxic agents can disrupt the skin flora**, which is essential for protecting the skin against pathogens and maintaining its hydration. The human skin, being a complex ecosystem composed of thousands of bacteria, fungi, and viruses, often referred to as

the skin flora or microbiome, plays a crucial role in protecting against pathogens, regulating the immune system, and protecting the skin barrier. Toxic agents in cosmetic products can disrupt this balance in several ways:

- **Destruction of Beneficial Bacteria**

Many preservatives and antibacterials like triclosan and parabens are designed to kill bacteria to extend product shelf life. However, in doing so, they can also eliminate beneficial bacteria from the skin, which play an essential role in protecting against infections and maintaining healthy pH.

- **Altération de la Fonction Barrière de la Peau**

Des ingrédients comme les sulfates (SLS et SLES), qui sont des détergents puissants, peuvent dépouiller la peau de ses huiles naturelles. Cette déshydratation force la peau à devenir plus perméable, permettant aux pathogènes et allergènes de pénétrer plus facilement, ce qui peut également mener à des inflammations et des irritations cutanées.

- **Alteration of Skin Barrier Function**

Ingredients like sulfates (SLS and SLES), which are strong detergents, can strip the skin of its natural oils. This dehydration makes the skin more permeable, allowing pathogens and allergens to penetrate more easily, which can also lead to inflammation and skin irritation.

- **pH Modification of the Skin**

The skin has a naturally acidic pH that helps inhibit pathogen growth. Alkaline products like certain soaps and cleansers can raise the skin's pH, disrupting the skin flora and making the skin more vulnerable to infections and dermatological diseases.

- **Inflammation and Oxidative Stress**

Compounds like synthetic fragrances and certain preservatives can provoke inflammatory reactions and oxidative stress in skin cells. This inflammation can damage skin cells and disrupt the normal chemical signals that help maintain the balance and health of the skin microbiome.

## **Consequences on Skin Health**

Long-term effects of toxic agents :

- **Increased Sensitivity and Allergic Reactions** An imbalanced skin flora makes the skin more susceptible to allergic reactions, eczema, and dermatitis.
- **Propension Accrue aux Infections:** Une réduction des bactéries bénéfiques peut permettre aux agents pathogènes opportunistes de coloniser la peau, menant à des infections fréquentes.
- **Increased Propensity to Infections** A reduction in beneficial bacteria can allow opportunistic pathogens to colonize the skin, leading to frequent infections.

- **Premature Skin Aging** Chronic inflammation and oxidative stress can accelerate the aging process by degrading collagen and elastin, the proteins that keep the skin firm and elastic.

## **Ingrédients Most Damaging Toxic Ingredients**

Substances to absolutely avoid :

Heavy metals like lead, and preservatives like parabens are among the most damaging, as they can disrupt hormonal systems and increase the risk of cancer.

### 1. Sodium Lauryl Sulfate (SLS) and Sodium Laureth Sulfate (SLES)



**Role in cosmetics:** Used primarily as cleaning agents, these chemicals are found in most shampoos, body cleansers, and toothpastes. They are responsible for the abundant foam that these products produce.

Negative effects:

- **Irritation (allergies):** Can irritate the skin, eyes, and dry out the scalp, causing redness, itching, and rashes.
- **Endocrine disruption (hormones):** Affect various bodily functions such as reproduction, development, menopause, sleep, and metabolism (weight gain). Anything related to hormones, hypothalamus, pituitary gland, thyroid, parathyroid glands, pancreas (liver), adrenal glands, testes in men, and ovaries in women.
- **Carcinogenic potential:** Although controversial, there are concerns about their ability to interact with other chemicals to form potentially carcinogenic compounds.

- **Bioaccumulation and aquatic toxicity:** They can reduce the growth of aquatic plants and affect the health of fish and other forms of marine life.
- **Difficult degradation:** Although sulfates are generally considered biodegradable, their massive presence in wastewater can pose challenges for water treatment systems and lead to environmental pollution.

## 2. Parabens (Methyl, Propyl, Butyl et Ethyl Paraben)

**Role in cosmetics:** Preservatives that prevent the growth of bacteria and mold, thus extending the product shelf life.

Negative effects :

- **Endocrine disruption (hormones):** Parabens can mimic estrogen and have been detected in human breast tissues, where they might contribute to breast cancer development or cause hormonal disorders.
- **Allergic reactions:** Can provoke skin reactions in sensitive individuals.

## 3. Phthalates

**Role in cosmetics:** Solvents and fragrance fixers in many scented products.

Negative effects :

- **Endocrine disruption:** Linked to reproductive development issues, particularly in males, and other hormonal disorders.
- **Environmental toxicity:** Can cause long-term damage to aquatic wildlife.

## 4. Formaldehyde and Formaldehyde Releasers

**Role in cosmetics:** Preservatives that prevent microbial growth.

Negative effects :

- **Carcinogenic:** Classified as a human carcinogen.
- **Major irritant:** Can cause allergic reactions, eczema, and respiratory tract irritation.

## 5. Sunscreens/UV Filters (Oxybenzone (Benzophenone-3))



**Role in cosmetics:** Protect the skin from sun damage.

Negative effects :

- **Bacterial resistance:** Its use can contribute to antibiotic resistance.
- **Endocrine disruption (hormones):** Affects thyroid function and could influence other regulatory hormones in the body. Affects various bodily functions such as reproduction, development, menopause, sleep, and metabolism (weight gain). All hormones, hypothalamus, pituitary, thyroid, parathyroid glands, pancreas (liver), adrenals, testes in men and ovaries in women.
- **Destabilizes pH**
- **Allergic reactions:** Chemical filters can cause allergic or dermatological reactions in some individuals, such as rashes or itching.
- **Skin absorption:** There are concerns about the ability of these substances to be absorbed through the skin and enter the bloodstream, potentially having long-term health effects.
- **Environmental impact:** When washed off the skin during swimming, some of these chemicals can harm the aquatic environment. For example, oxybenzone has been linked to coral bleaching and death.

## 6. Triclosan

**Role in cosmetics:** Antibacterial added to many soaps, toothpastes, and deodorants.

Negative effects:

- **Bacterial resistance:** Its use can contribute to antibiotic resistance.

- **Endocrine disruption:** Affects thyroid function and could influence other regulatory hormones in the body.

## 7. Silicones



**Role in cosmetics:** Improve the texture and feel of products on the skin and hair, acting as emollients and conditioners to soften, smooth, and facilitate styling. Negative effects:

Negative effects:

- Endocrine disruption: Affects thyroid function and could influence other regulatory hormones in the body.
- Allergic reactions
- Pore-clogging
- Alters skin barrier functions, affecting the flora and proper skin functioning
- Limits skin cell renewal
- Traps bacteria and dust
- Environmental impact: Can influence habitats and potentially the food chain.

## **Environmental and Health Impacts**

Chemical agents like phthalates and perfluorinated compounds severely harm the environment, disrupt aquatic ecosystems, and can affect reproduction in humans and animals.

### **Environmental Impacts**

- **Water Pollution and Aquatic Ecosystems**

Compounds like parabens, phthalates, and silicone compounds are frequently found in wastewater and can escape standard water treatment, ending up polluting rivers, lakes, and oceans. Once in the aquatic environment, they can disrupt local fauna and flora, affecting the reproduction of aquatic species and reducing biodiversity.

- **Bioaccumulation and Endocrine Disruption**

Certain chemicals used in cosmetics are persistent in the environment and tend to accumulate in living tissues, a process known as bioaccumulation. Substances like chemical UV filters and certain types of preservatives can act as endocrine disruptors in wildlife, altering their reproduction and development.

- **Impact on Soils and Terrestrial Biodiversity**

Toxic agents that settle on the soil can affect the soil's microflora and microfauna. This disruption can have cascading effects on the food chain and soil fertility, affecting plant health and food security.

- **Contributions to Climate Change**

The production and disposal of cosmetic products containing toxic agents also contribute to greenhouse gas emissions. Industrial processes involved in the synthesis of these chemicals and the management of waste generated by used cosmetic products can significantly impact the carbon footprint.

### **Health Impacts**

- **Carcinogenic Risks**

Many chemical agents used in cosmetics, such as certain preservatives and formaldehyde compounds, are known for their carcinogenic properties. Repeated exposure can increase the risk of skin, breast, and other types of cancers.

- **Reproductive Disorders**

Substances like phthalates and certain parabens act as endocrine disruptors, interfering with the body's natural hormones. This can lead to fertility issues, birth defects, and other reproductive disorders.

- **Neurological Effects**

Some chemical compounds in cosmetics are likely to cause neurological damage or contribute to neurodegenerative diseases due to their toxicity to the nervous system.



- **Allergies and Sensitivities**

Agents like fragrances and certain preservatives can cause allergic reactions, contact dermatitis, and other sensitive skin reactions in exposed individuals.

## **Impact of Toxic Agents on Hair Health and Beauty**

The health and appearance of hair and scalp can be profoundly affected by toxic agents contained in many hair products. Here are some of the most common effects these substances can have:

- **Dryness and Hair Fragility**

Sulfates like sodium lauryl sulfate (SLS) and sodium laureth sulfate (SLES) are powerful detergents found in many shampoos. Although effective at removing grease and dirt, these compounds can also strip the hair of its natural oils, leading to excessive dryness, fragility, and split ends.

- **Scalp Irritation**

Preservatives like parabens and certain alcohols can irritate the scalp, causing itching, redness, and seborrheic eczema. These reactions can not only be uncomfortable but also harm the overall appearance of hair.

- **Disruption of Hair Growth Cycle**

Some compounds like endocrine disruptors (phthalates and certain parabens) can interfere with the body's natural hormones. This can affect the hair growth cycle, potentially leading to premature hair loss or thinning.

- **Product Build-up and Hair Health Impact**

Silicones, commonly used to make hair soft and smooth, can accumulate on the hair shaft and scalp. This build-up creates a barrier that prevents moisture from penetrating, making hair dull and lifeless over time and inhibiting the effectiveness of nourishing hair treatments.

## **Reversing Damaging Effects**

### **Opt for a detox cure with Davincia®**

With the Biocompatible Treatment®, a unique and patented formula, it is possible to rid the skin of accumulated toxins. This treatment offers a true intelligent curettage of harmful dermal materials, freeing the skin from pollutants and allowing it to function better.

The Biocompatible Treatment® contains freshly released living microorganisms that participate in deep cleaning of your skin while providing essential nutrients for its proper functioning. This unique treatment also helps strengthen the skin's immunity by optimizing the quality of its flora, notably thanks to the probiotics it contains. A healthy skin flora participates day and night in neutralizing pollutants and protecting the skin.

## **Conclusion**

### **Choosing Safe Alternatives**

Awareness of the dangers posed by toxic substances in cosmetic products is essential not only for individual health but also for environmental well-being. Choosing safer, toxin-free cosmetic products is crucial. By favoring alternatives free of endocrine disruptors and harmful chemicals, you protect both your health and that of the planet.

In this regard, Davincia® products stand out as an exemplary solution. The products are formulated from 100% natural ingredients free of any toxic agents, ensuring a high-end beauty experience safely. Not only are these products beneficial for the skin, but they also help protect our planet by avoiding chemical pollution that affects our ecosystems. By choosing Davincia®, you opt for pure, effective beauty in harmony with the values of a healthy lifestyle and a preserved environment.

See the list of 30 toxic agents on the following pages.

# TOXIC AGENTS TO AVOID



Dermonaturopath, Mrs. Nathalie Forget ND.A., the founder of Davincia® has made it her mission to raise your awareness by helping you make informed choices through the use of safe and clean products.

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TOXIC AGENTS TO AVOID	FUNCTION	TOXICITY	WHERE TO FIND	FOOD
<b>Heavy metals</b> (talcum powder, aluminium, lead...)	Found in fat animals and in nature	Neurotoxic	Lipstick Baby powder Deodorant	
<b>Dioxins, Chlorine derivatives</b>	By-products of chlorine bleaching	Carcinogenic Neurotoxic Cardiotoxic Allergen	Bleached fabrics (sanitary towels, tampons, toilet paper, cotton swabs, etc.) antibacterial cleaners, plastic bottles (PET bottles do not contain any) and deodorants.	
<b>Coloring agents derived from coal tar</b> (EXT DC Violet 2, DC Yellow 10 and 11, FDC Blue 1, FDC Green 1, FDC Red 3, DC Red 2 and 19)	Color	Carcinogenic Neurotoxic	Make-up Hair dye Shampoo	X
<b>Alkylphénols / Alkylphenols</b> Nonylphenol ; nonoxynol ; octylphenol ; O-phe-nylphenol ; Propylphenol ; Amylphenol ; Heptylphenol ; Dodecylphenol ; Methylphenol (ou cresol) ; Ethylphenol (ou xylenol) ; 4-tert-Octylphenol	Chemical intermediate from surfactants Cleaner Emollient Dispersant Solubilizer Antistatic	Environmentally harmful Reproductively toxic Carcinogenic Endocrine disruptor	Derived from the degradation of toxic ingredients: plastics, men's products, nail polish, dyes	
<b>Sodium lauryl sulfate</b> (SLS)/sodium laureth sulfate (SLES)/ Ammonium Lauryl Sulfate (ALS)	Cleaner	Hormone disruptor Contains dioxins Carcinogenic Dermatitis Allergen	Shampoo	
<b>Parabens</b> (Methyl-, ethyl, propyl-, butyl-, isobutyl-)	Preservative (Antifungal, antibacterial)	Reproductively toxic Endocrine disruptor Stomach damage Allergen	In most cosmetics	X
<b>BHA and BHT</b>	Conservator	Environmentally harmful Reproductively toxic Endocrine disruptor Carcinogenic	Make-up Moisturizers	Mayonnaise, cereals, oils...
<b>Plastic beads</b>	Plastic Exfoliator	Carcinogenic Neurotoxic	Exfoliator cleanser	
<b>TEA (triethanolamine), DEA (Diethanolamine), Cocamide DEA, Lauramide DEA</b>	Cleaner	Carcinogenic Neurotoxic	Foaming products Creams	
<b>Triclosan</b> Cloxifenolum, Irgasan, Lexol 300, Aquasept, Gamophen, TCL, DP300, éther de diphenyle d'hydroxyle 2,4,4 ; Trichlorine-2	Antibacterial	Environmentally harmful Endocrine disruptor Bacterial resistance	Toothpaste Cleaners	
<b>Iodopropinyl Butylcarbamate</b> IBP, IPBC, butyl-3-iodo-2-propynyl carbamate	Conservator	Reproductively toxic Endocrine disruptor Allergen	Inhalation products Aerosol (spray, powder)	

TOXIC AGENTS TO AVOID	FUNCTION	TOXICITY	WHERE TO FIND	FOOD
<b>Titanium dioxide (nanoparticles)</b> (Titanium oxide, E171, TiO <sub>2</sub> ) <b>Zinc oxide (nanoparticles)</b> (CI 77947, zinc white, ZnO)	Mineral sunscreen UVA/UVB protection Anti-odor Color	Neurotoxicity Pulmonary toxicity brain toxicity Allergen	Suncare products Make-up Deodorants	X
<b>Solar filters / UV filters</b> Ethylhexyl [Dimethyl PABA / Salicylate / Triazone / Methoxycinnamate] Homosalate, Octocrylene, Benzophenone-3, ButylMethoxydibenzoylmethane, 3-Benzylidene Camphor, 4-Methylbenzylidene Camphor, Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine, Drometrizole Trisiloxane, Benzophenone, Methanone, Oxybenzone ; Durascreen ; Solaquin ; Benzotriazolyl	Chemical sunscreen, UVA/UVB protection	Endocrine disruptor Environmentally harmful Allergen	In suncare products	
<b>Formaldehyde and formaldehyde releasers</b> Formol ; Formalin ; Formic Aldehyde ; Paraform ; Methanal ; Methyl Aldehyde ; Methylene ; Oxide Oxymethylene ; Oxomethane ; DMDM hydantoin ; Diazolidinyl Urea ; Imidazolidinyl ; Urea, Methenamine ; Quaternium-15	Impurities derived from preservatives Colorless gas	Environmentally harmful Endocrine disruptor Carcinogenic Allergen	Nail polish Some cleaners	
<b>Silicones</b> (Cyclomethicone, Dimethicone (silicone oil)), Siloxanes (Cyclotetra-, Cyclopenta-, Cyclohexa-)	Plastic effect Silky effect	Environmentally harmful Reproductively toxic Endocrine disruptor	Products for straightening, moisturizing and softening hair	
<b>Methylchloroisothiazolinone (CMIT)</b> 5-Chloro-2-methyl-4-isothiazolin-3-one and MCI <b>Methylisothiazolinone (MIT)</b> 2-methyl-4-isothiazolin-3-one, Neolone 950 preservative, MI, OriStar MIT, Microcare MT, Kathon CG,	Conservator	Inhalation toxicity Contact eczema Pulmonary toxicity Neurotoxicity Allergen	In certain cosmetics (shampoos, serums, conditioners, etc.)	
<b>Petroleum derivatives</b> (Petrolatum, paraffin, mineral oil, petroleum jelly, Ceresin, microcrystalline wax, Ozokerite)	Moisturizing barrier	Carcinogenic potential Environmentally harmful Allergen	Moisturizers Make-up Deodorants	
<b>Perfumes</b> (Benzylsalicylate, Cinnamal, Citral, Coumarin, Eugenol, Geraniol, Isoeugenol, d-Limonene Linalool, Lyral) 24 recognized	Sensorial pleasure	Carcinogenic potential Contact dermatitis Environmentally harmful Allergen	In most cosmetics	
<b>Perfluorids</b> (perfluoroalkylated, polyfluoroalkylated (PFAS), perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA))	Waterproof Surfactant Anti-stain Additives	Environmentally harmful Endocrine disruptor Reproductively toxic "effects on the liver, thymus and blood chemistry". Carcinogen	Sewage Certain cosmetics : Shaving cream	X
<b>Phtalates</b> (dibutyl phtalate, Perfume, Fragrance : Disodecyl Phthalate (DIDP) )	Solvent	Environmentally harmful Endocrine disruptor Reproductively toxic	Nail polish Perfumes Hair spray	
<b>PEG- 6 / 8 / 40 / 100 / 150</b> (Synonyms : Polysorbate, Polyethylene glycol, Tween), PPG (Polypropylene glycol)	Solvent Emulsifier	Environmentally harmful Carcinogenic Allergen CNS Irritant	In most cosmetics	
<b>Phenylenediamine</b> (1,4-Benzenediamine, CI 76060, P-Aminoaniline)	High-temperature stability Physical resistance Colorant	Environmentally harmful Reproductively toxic Allergen Carcinogenic Irritant	Hair products	
<b>Propylene Glycol</b> (propanediol, methyl ethyl glycol, dihydroxypropane, hydroxypropanol)	Replaces glycerin Moisturizer Solvent	Liver and kidney damage Reproductively toxic Dermatitis Allergen Irritant	In most cosmetics Deodorant Moisturizing cream Shampoo...	