



The Non-Toxic Black Beauty Project

A Report by the Campaign for Safe Cosmetics



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Cosmetics, a program of
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The Campaign for Safe Cosmetics (CSC) leads the movement to make beauty and personal care products safer for all. BCPP's Campaign for Safe Cosmetics protects people and the planet from toxic chemicals by educating the public; transforming the beauty industry to make products safer; and advocating for health-protective laws that benefit everyone regardless of where they live, work, or shop.

CSC is a program of Breast Cancer Prevention Partners (BCPP), a national science-based advocacy organization working to prevent breast cancer by eliminating toxic chemicals and other environmental exposures linked to the disease. We would like to acknowledge the contributions of Drs. Jasmine McDonald and Adana Llanos, Hannah McCall, Tianna Shaw Wakeman and Astrid Williams who reviewed the report; the following Breast Cancer Prevention Partners staff who worked on this project including Dr. Sharima Rasanayagam, Dr. Janet Gray, Emily Reuman, and Angela Ng; as well as our talented and hard-working interns Jelonia Rumph, Jasmine Kang, Savannah Gaines, and Darius Stenstedt.

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www.safecosmetics.org/Black-Beauty-Project



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Introduction

■ Background

Thousands of industrial chemicals are used to create the personal care and beauty products that consumers and professional hair, nail, and beauty salon workers use every day. Many of these chemicals are linked to negative impacts on both human health and the environment by contributing to both air and water pollution.

Conservative estimates suggest Americans use roughly 10-12 personal care products each day (the actual number may be closer to 20-25), resulting in daily exposure to an average of 168 unique chemicals – many of which are linked to endocrine disruption, earlier puberty,¹ cancer, birth defects, and reproductive harm. Despite the growing body of scientific evidence and consumer concern, cosmetics are one of the least regulated consumer products on the market. Currently, the Food and Drug Administration (FDA) does not have the authority to require pre-market safety testing of cosmetic ingredients. Due to weak federal regulation of the more than 10,000 chemicals used to formulate personal care and beauty products, companies can and often legally do use hazardous chemicals in their products, without the public's knowledge or consent. The European Union (EU) bans nearly 1,800 chemicals from beauty and personal care products that are known to cause cancer, birth defects, or reproductive harm. In stark contrast, the FDA only bans or restricts 11 ingredients from cosmetics to date.² More than 40 other nations have stricter cosmetic safety regulations than the U.S.

For Black women, this issue is especially critical. Beauty products marketed to and used by Black women and professional hair, nail, and beauty salon workers often contain the most toxic ingredients used by the cosmetics industry, including chemicals linked to breast and ovarian cancer, uterine fibroids, reproductive harm, and more. This toxic exposure is of particular concern to Black women because they purchase and use more beauty products per capita than any other demographic – spending more than \$7.5 billion³ on beauty products every year and nine times more⁴ on hair products than the average consumer. This leads to a high level of exposure to unsafe chemicals that are found in Black beauty products – including hair dyes, hair relaxers, straighteners, skin lighteners, feminine douches, deodorant, etc.^{5, 6, 7} Indeed, studies show that Black women are more likely to use hair products that contain unsafe chemicals.⁸

Eurocentric and racialized beauty standards fuel the growth of a toxic cosmetic industry and contribute in large part to the over-exposure of Black women to hazardous chemicals in beauty products. A recent study published in the scientific journal *Environmental Justice* examined the influence of social-structural factors on beauty perceptions and personal decisions around product use.



Beauty products marketed to and used by Black women and professional hair, nail, and beauty salon workers often contain the **most toxic ingredients used by the cosmetics industry.**

The study surveyed nearly 300 women of color in New York City's Northern Manhattan and the South Bronx communities and found that Black respondents were more likely to use chemical straighteners than non-Black respondents.⁹ Respondents' perceptions that others believe straight hair or lighter skin confer benefits such as beauty, professionalism, or youth were associated with greater use of chemical straighteners and skin lighteners. These findings highlight the pervasiveness of racialized beauty norms and point to the need to reduce the demand for and sale of these products through community education, market-based strategies, and public policy.¹⁰

Similarly, professional salon workers – many of whom are Black women and other women of color – also bear a disproportionate burden of toxic exposures because of where they work, the products they work with, and the toxic products marketed to them.¹¹ The chemical exposures that exist for salon workers stem from the potentially hazardous products they work with every day, including nail polish hardeners, thinners, plasticizers, bleaches, conditioners, detergents, dyes, fixatives, relaxers, and straighteners that are most often used as commercially prepared mixtures.^{12, 13} The work environment of hair stylists has been reported to contain exposures that can be harmful to reproductive health and can cause cancer, skin irritation, and allergies. In fact, the International Agency for Research on Cancer (IARC) lists the occupation of a hairdresser or barber as a probable carcinogen.¹⁴

The negative health outcomes associated with ongoing exposure to the toxic chemicals found in beauty and personal care products are cause for concern. Some chemicals in hair care and personal care products, such as phthalates,^{15,16,17} heavy metals,¹⁸ and polybrominated diphenyl ethers (PBDEs),¹⁹ are associated with earlier puberty among girls.⁶ Heavy metals, such as cadmium and lead, are found in many cosmetics products used by Black women, such as lipsticks, eyeliners, eyeshadow, foundation, and more. These metals have been linked to higher instances of uterine fibroids.^{20,21,22} Additionally, some chemicals found in the personal care products and cosmetics used by Black women have been associated with altered reproductive outcomes, including preterm birth,^{23,24,25} gestational diabetes,²⁶ and hypertensive disorders of pregnancy.²⁷ Chemicals known as aromatic hydrocarbons, which may show up on product labels as “toluene,” “benzene,” or “xylene,” have been shown to have toxic effects on developing fetuses.²⁸



DID YOU KNOW?!

Black women purchase **\$7.5 B beauty products** a year and those who regularly dye their hair face a **60% higher risk of breast cancer.**



The unsafe chemicals in Black beauty products likely contribute to the many health disparities Black women currently face, including the highest breast cancer mortality rate of any racial or ethnic group in the U.S., with a rate at least 41% higher than that for White women.²⁹ Black women also face other health disparities, including earlier puberty³⁰ and higher rates of hormone-mediated health problems (e.g., preterm birth^{31, 32} and uterine fibroids^{33, 34}), an increased incidence of endometrial cancer,³⁵ and poorer ovarian cancer outcomes.³⁶ These health disparities may be due in part to the chemical exposures Black women experience from beauty

and personal care products. Recent evidence shows that among Black women, the use of permanent hair dye is associated with approximately 45-75% increased risk of breast cancer,^{37,38,39} with a greater risk for use of darker hair dye shades.¹⁸ Regular use of chemical relaxers and straighteners may increase the risk of breast cancer in women,^{19,40,41} particularly when used frequently, for longer periods, or started in childhood or adolescence. Use of lye-based relaxers may also be a risk factor for breast cancer.

In their landmark publication, Drs. Ami Zota and Bhavna Shamasunder were among the first to frame the disproportionate exposure of Black women to toxic chemicals in beauty products as an environmental justice concern.^{40,41} They argued that elevated exposures to beauty product chemicals in women of color are, in part, attributable to the “environmental injustice of beauty” – a framework that links intersectional systems of oppression (i.e., racism, sexism, classism) to Eurocentric beauty norms

(e.g., societal preferences for light skin and straight hair) and racialized beauty practices, all of which can have long term consequences on women's chemical exposures and their health and wellbeing.

Project Impetus

To help address the health inequities and environmental injustice surrounding Black beauty, the Campaign for Safe Cosmetics (CSC) began working on its Non-Toxic Black Beauty Project in 2020. In the wake of the killings of George Floyd, Breonna Taylor, and Ahmaud Arbery, and in solidarity with the Black Lives Matter movement, a growing drumbeat to support and shop Black-owned businesses emerged. Social media exploded with lists of recommended Black-owned businesses, including beauty companies in popular mainstream magazines like Allure, Essence, Vanity Fair, and Vogue.

Upon closer examination, we became concerned that many of the lists of Black-owned beauty brands, recommended by influencers and mainstream media alike, included beauty and personal care products made with toxic ingredients. Given the ongoing exposure that Black women experience to toxic chemicals because of where they live or work, we did not want to see these well-intentioned lists of Black-owned beauty brands further exacerbate already existing environmental justice concerns. So, with the guidance and help of a broad-based Advisory Committee made up of leading NGOs and scientists working to improve Black women's health, we launched the Non-Toxic Black Beauty Project and curated our own list of safer Black beauty brands to get non-toxic beauty products into the hands of Black women and girls.

The project has five overarching goals and objectives, which include: 1) creating a list of non-toxic beauty products made by Black-owned beauty brands, so



Five Goals of the Non-Toxic Black Beauty Project:

- 1 **Create a list** of non-toxic products made by Black-owned beauty brands
- 2 **Develop and share** tip cards and other resources to help Black women make safer purchases
- 3 **Elevate companies** that are making safer products for Black women and provide technical support to businesses that want to do better
- 4 **Raise awareness** about the hazardous chemicals in Black beauty products
- 5 **Expand the CSC Red List of chemicals of concern** to include health outcomes of particular concern for Black women

Black women can shop with confidence knowing the beauty and personal care products they purchase don't contain harmful chemicals; 2) developing and sharing tip cards and other resources that Black women can trust to help them make safer purchases; 3) growing the safe Black beauty industry by elevating companies that are making safer beauty and personal care products for Black women and providing technical support to Black-owned beauty businesses that don't make the list and want to do better; 4) raising public, manufacturer, and retailer awareness about the hazardous chemicals in Black beauty products; and 5) expanding the CSC Red List of chemicals of concern in cosmetics to include health outcomes of particular concern for Black women, which include allergic reactions, diabetes, early puberty, endometriosis, infertility, less successful IVF outcomes, maternal health, ovarian cancer, polycystic ovarian syndrome, pregnancy complications, preterm birth, and uterine fibroids.

■ Project Accomplishments to Date

After two years of hard work, the Non-Toxic Black Beauty project officially launched to the public on October 18, 2022. This project grew significantly larger than our original plan of simply curating a list of safer Black-owned beauty brands. Public resources created to date, and available on the Campaign for Safe Cosmetics website, include:



List of 78 Top Black-owned beauty brands and a searchable database of their nearly 800 non-toxic Black beauty products



Red List of Chemicals of Concern in cosmetics contributing to 13 diseases and chronic health conditions concerning Black women



Annotated bibliography of 141 published scientific journal articles linking chemicals present in Black beauty and personal care products to negative health outcomes disproportionately experienced by Black women



Tailored fact sheets for nurses, hair stylists and the general public; tip cards, social graphics, and more



Methodology

■ Expansion of the CSC Red List

In 2015, BCPP's Campaign for Safe Cosmetics developed a Red List of Chemicals of Concern in Cosmetics to serve as a resource and tool to help brands, companies, and retailers reduce their use of toxic chemicals in the beauty and personal care products they make and sell. Adopting and making a list of prohibited (or "Do Not Use") substances publicly available helps companies and consumers alike by advancing transparency, increasing customer trust, and guiding safer product formulations. It also establishes guidelines for suppliers of fragrance, raw materials, and finished products to ensure these entities are aware of and avoid the use of chemicals the company has pledged to eliminate.

■ Creation of the List of Non-Toxic Black-Owned Beauty Brands

We started by surveying mainstream and ethnic beauty magazines and media to create an initial list of over 400 Black-owned beauty brands that we identified as selling personal care and beauty products that were primarily marketed to Black women. We vetted this initial list of brands and removed companies that were less than 51% Black-owned, whose main product line did not include Black beauty products, or that did not provide ingredient lists on their website. This resulted in a list of 283 Black-owned beauty brands whose product ingredients were then vetted for safety against the CSC Red List of Chemicals of Concern in Cosmetics to generate the List of Top Black-Owned Beauty Brands and the searchable Database of Non-Toxic Black Beauty Products (See Appendix 1).

Creation of the Black Beauty Product Database

We then scraped the product ingredients from the websites of the 283 Black beauty brands that made it onto our initial list to produce an ingredient database with 7,745 individual products covering nine different product categories (see Table 1): bodycare, fragrance, haircare, makeup, nail products, personal hygiene, skincare, sunscreen, and other. For each product, we collected the product name, product category, product type, price, price range, UPC (universal product code), an image of the product, a webpage link, and the full ingredient list provided on the company's website.

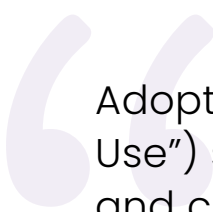
TABLE 1. CATEGORIES AND TYPES OF PRODUCTS INCLUDED IN THE NON-TOXIC BLACK BEAUTY PRODUCT DATABASE

PRODUCT CATEGORY	DESCRIPTION
BODYCARE	Body lotions, body butter, body scrubs, foot creams, body oil, bubble bath, bath bombs, bath salts
FRAGRANCE	Perfume/parfum, body spray, vaginal spray, body mists, scents, body fragrance, aromatherapy, essential oils – products whose primary purpose is to add scent to any part of the body
HAIRCARE	Shampoo, conditioner, gel, mousse, hair dye, hair straighteners, relaxers, hair oils
MAKEUP	Foundation, face powder, concealer, lipstick, lip liner, blush, eye shadow, mascara, eyeliner
NAIL PRODUCTS	Nail polish, topcoat, nail polish remover, cuticle cream, nail glue – anything with 'nail' in the name
PERSONAL HYGIENE	Deodorant, mouthwash, soap, toothpaste, body wash, liquid soap, 3-in-1 products (body wash, bubble bath, shampoo)
SKINCARE	Facial cleansers, lip balm, moisturizers with or without SPF, anti-aging products, toners, masks, facial scrubs, creams, peels – products used on the face that are not makeup
SUNSCREEN	Sunscreen creams, sprays, oils (note: makeup with SPF is categorized as makeup)
OTHER	Any products not captured by the above product categories

The Campaign's initial Red List included 102 chemicals found in personal care products that pose serious, chronic health concerns including cancer, hormone disruption, and reproductive and developmental harm. In 2018, we then expanded the Red List of Chemicals of Concern to also include chemicals used in cleaning products and fragrances. The updated list included the original cosmetics Red List, fragrance ingredients found through product testing, as well as authoritative lists of hazardous chemicals compiled by colleague organizations, researchers, and reputable scientific organizations.

In 2022, as a key part of CSC's Black Beauty Project, we created a third iteration of the Red List, this time including cosmetic chemicals of concern that are linked to adverse health outcomes disproportionately impacting Black women (Tier 1 or "Do Not Use" Chemicals of Greater Concern for Black Women).

We worked with the Project's Black Beauty Advisory Committee to identify diseases and serious health conditions of concern to Black women that were not already captured in the 2018 CSC/BCPP Red List. These were identified as allergic reactions, diabetes, early puberty, endometriosis, infertility, less successful IVF outcomes, maternal health, obesity, ovarian cancer, polycystic ovary syndrome, pregnancy complications, preterm birth, and uterine fibroids. This project represents the first comprehensive effort to generate a list of chemicals of concern in Black beauty products that should be avoided by consumers, cosmetic manufacturers, and retailers.



Adopting and making a list of prohibited (or "Do Not Use") substances publicly available helps companies and consumers alike by **advancing transparency, increasing customer trust, and guiding safer product formulations.**

The Red List's Tier 1 or "Do Not Use" Chemicals of Greater Concern for Black Women also attempts to address: 1) bias in scientific research on chemical exposures that does not adequately account for the unequal burden Black women experience through their use of beauty products; and 2) inadequate capture of hazardous chemicals linked to negative health outcomes in Black women by governmental and scientific organizations that create authoritative lists of hazardous chemicals.

Because none of the negative health outcomes identified by the project's Advisory Committee are captured – or listed by – authoritative scientific or governmental organizations like the International Agency for Research on Cancer (IARC) or the National Toxicology Program (NTP), we completed a comprehensive review of the scientific literature to investigate these potential links ourselves.

We performed multiple searches of PubMed (database of published scientific articles in the National Library of Medicine), utilizing keywords to find articles in the peer-reviewed literature that connected exposure to the chemicals that are present in personal care or beauty products with negative health outcomes. See Appendix 2 for the full list of keywords and search terms.

We used a formal scoping review process to review the articles. Scoping reviews are a method of synthesizing evidence to provide a wide perspective on a research topic. They are especially relevant for complex areas of research where different research methods may apply and offer a rigorous, transparent, and comprehensive approach to reviewing the literature. Unlike systematic reviews, researchers may not rate the quality of the literature, because scoping reviews are a means to get a broad overview of a research area.

For each of the health concerns, we screened the titles from the PubMed searches for relevance. The abstracts were then reviewed for possible inclusion by two independent researchers with a third acting as a tiebreaker. Next, we read the full papers and entered the findings and other details of the studies in a spreadsheet that tracked our findings. We did not weigh chemicals of concern against one another but assessed whether findings of associations were significant and therefore suggested concern.

In total, we reviewed 8,119 titles and 580 scientific papers. Through this review process, we identified 126 scientific studies that showed a significant association between chemicals in personal care products and health concerns for Black women. We then expanded the CSC's Red List to include the findings from these studies to have a more representative list of both the chemicals of concern in beauty and personal care products marketed to Black women and related negative health outcomes.

We also created an annotated bibliography to capture the findings from these studies and used the findings to expand the BCPP Red List. This annotated bibliography provides a summary of – and full citations for – the approximately 126 scientific journal articles referenced in Tier 1 of the CSC Red List of Chemicals of Concern in Cosmetics. Each of these articles presents links between one or more chemicals found in beauty products and negative health outcomes experienced by Black women.

Scientific journal articles we analyzed range from as early as 1989, when environmental exposures became a hot topic following the initiation of the Clean Air and Water Act, to 2021, (comma after 2021) when unsafe exposures via personal care products began to gain public attention. The studies within this list are categorized by health conditions, including diabetes, puberty, endometriosis, fertility, menopause, maternal health, obesity, cancer, preterm birth, polycystic ovary syndrome, uterine fibroids, and allergies. Within each group, the APA style source is listed, and directly under the source is a short synopsis of the goal and results of the study. Out of the 141 papers ,43 investigate maternal health, 8 investigate obesity, 11 investigate cancer, 1 investigates PCOS, 7 investigate preterm birth, 5 investigate fibroids, 2 investigate allergies.

With this latest update, companies can use our Red List to avoid ingredients linked to health outcomes of greater concern to Black women, and retailers can use our Red List to select safer Black beauty products to stock on their store shelves.

See Appendices 4 and 5 for visuals and links to download the updated Red List and Annotated Bibliography.

■ The New 3-Tier Red List of Chemicals of Concern in Cosmetics

The new BCPP Red List was released in August 2022 and includes 480 chemicals used in beauty, personal care products, and/or as fragrance ingredients. The list includes:

- **241 Tier 1** chemicals of concern that should be prohibited from use in personal care or as fragrance ingredients by manufacturers and retailers. This includes chemicals that are listed on an authoritative list (such as the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), California's Prop. 65 Program, etc.) as being harmful to human health and chemicals that are not on authoritative lists but for which our literature review found multiple independent studies linking them to relevant human health effects.
- **112 Tier 2** emerging chemicals of concern and eco-toxicants that should be avoided in products whenever possible. We defined "emerging chemicals of concern" as chemicals that only have a single study from our literature review indicating a human health concern. Chemicals designated as eco-toxicants by authoritative bodies are also included in Tier 2.
- **127 Tier 3** asthmagens, allergens, and irritants whose presence in products should be disclosed so people suffering from these adverse health effects can avoid these chemicals of concern. This includes chemicals designated as asthmagens, allergens, and/or irritants by authoritative bodies.

For a list of the authoritative governmental and scientific lists of hazardous chemicals used to build the Red List, and a discussion on chemicals of concern listed as Tier 1 chemicals because of special circumstances, see Appendix 5.

■ Top Black-Owned Beauty Brands and a Searchable Database of Non-Toxic Black Beauty Products

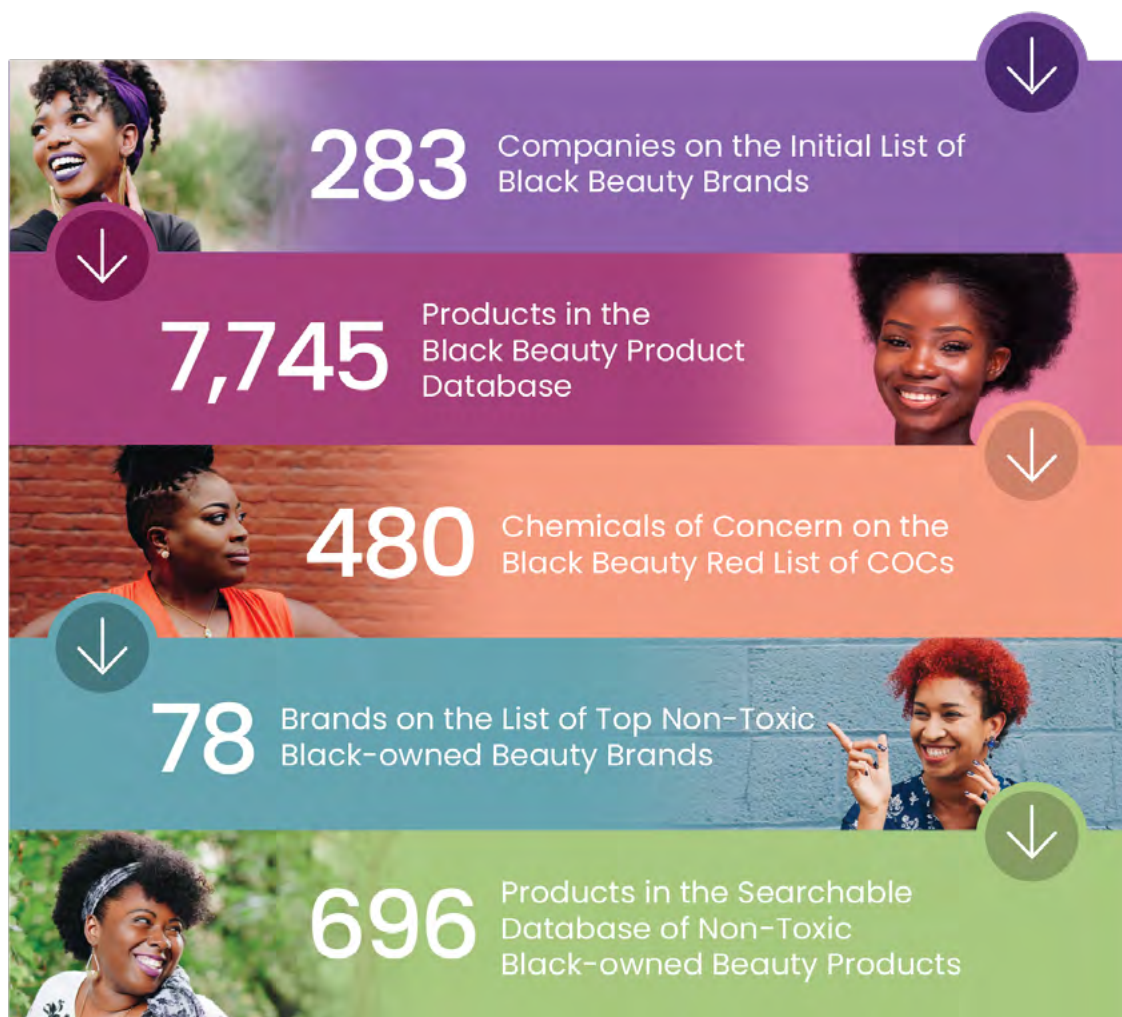
Working with our partner, Clearya, we screened the Black Beauty Product Database against Tier 1 Red List chemicals. Brands that did not have any of the Tier 1 chemicals in their products were placed on our List of Top Black-Owned Beauty Brands, which includes 78 brands. The nearly 700 products sold

by these brands are featured in our searchable Database of Non-Toxic Black Beauty Products. See Appendix 1 for the full List of Top Black-Owned Beauty Brands and a visual and link to the searchable Database of Non-Toxic Black Beauty Products.

Companies that did not make the list were contacted by email and offered a free report identifying the Tier 1 chemicals of concern that we found in their products and the adverse health effects associated with exposure to said chemicals. We also invited the company to let us know if they would be interested in further technical support and/or referrals to resources on how to identify safer alternatives.

See Figure 1 for a visual representation of the process we utilized to move from our initial list of Black-owned beauty brands to the creation of the final List of Top Black-Owned Beauty Brands and the searchable Database of their Non-Toxic Beauty Products.

FIGURE 1. NON-TOXIC BLACK BEAUTY PROJECT FLOWCHART



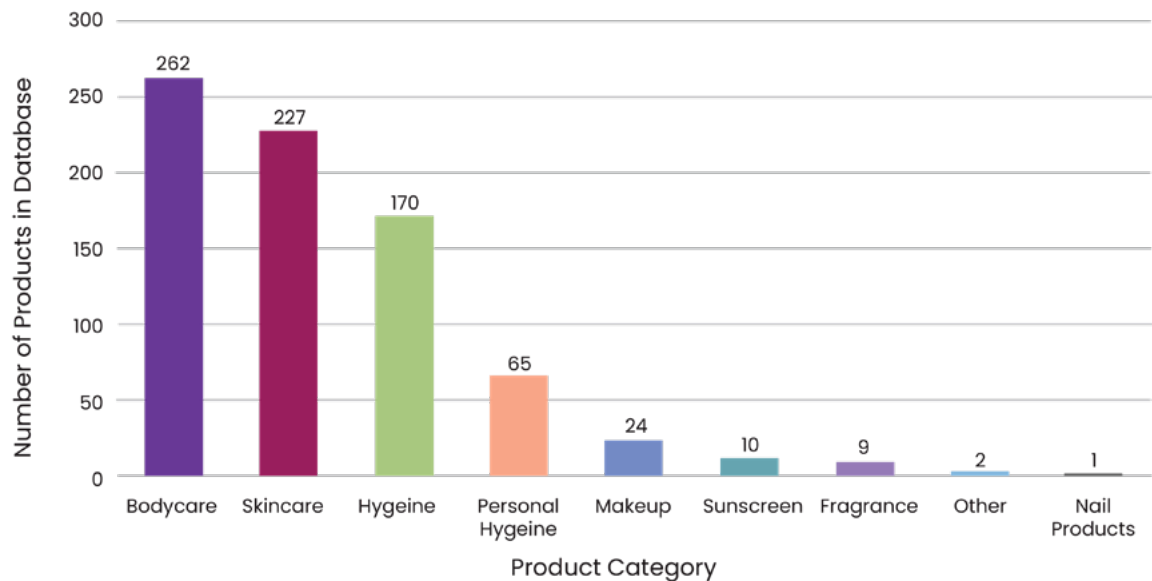


Findings

■ Non-Toxic Black Beauty Products

The Campaign’s Non-Toxic Black Beauty Project created a searchable Database of Non-Toxic Black Beauty Products to help consumers make more informed purchases and guide the efforts of manufacturers and retailers to make and sell safer products. We aimed to create a comprehensive database that includes products from a full range of product categories that Black women use in their everyday lives. In total, our database has a total of 696 products that span 9 product categories. From the highest number of product options to the lowest number of product options, these categories are bodycare, skincare, haircare, personal hygiene, makeup, sunscreen, fragrance, other (any product that is not captured in one of the main categories, such as hand sanitizer), and nail products. See Figure 2 for the numerical breakdown of the product categories in the searchable Database of Non-Toxic Black Beauty Products. Note that some products fall under multiple product categories.

FIGURE 2. NUMBER OF PRODUCTS IN THE DATABASE OF NON-TOXIC BLACK BEAUTY PRODUCTS BY PRODUCT CATEGORY



■ Top Chemicals of Concern in Black Beauty Products

Our ingredient analysis of the 7,745 products in our initial list of Black Beauty products provided insight into the most frequently used chemicals of highest concern in Black beauty products (a.k.a. Tier 1 Red List chemicals). Table 2 shows the top 15 most frequently found Tier 1 Red List chemicals, how many times they were flagged in the products we analyzed, and the associated health effects with each chemical.

**TABLE 2. TOP 15 MOST FREQUENT TIER 1 RED LIST CHEMICALS
FOUND IN BLACK BEAUTY PRODUCTS**

TIER 1 RED LIST CHEMICAL OF CONCERN	NUMBER OF TIMES FLAGGED IN INGREDIENT ANALYSIS	ASSOCIATED HEALTH CONCERNS
TITANIUM DIOXIDE (IN INHALABLE FORMS ONLY)	530	Lung cancer
PARABENS (METHYL, ETHYL, BUTYL, AND PROPYLPARABEN)	424	Endocrine disruption, skin cancer, developmental and reproductive toxicity
CRYSTALLINE SILICA (IN INHALABLE FORMS ONLY)	366	Lung cancer, endocrine disruption, developmental and reproductive toxicity
RETINOL (VITAMIN A) (WHEN IN DAILY DOSES >10,000 IU, OR 3,000 RETINOL EQUIVALENTS)	233	Cancer, developmental and reproductive toxicity
BUTYLATED HYDROXYTOLUENE (BHT)	215	Endocrine disruption, organ- system toxicity, developmental and reproductive toxicity, cancer, respiratory irritation
BUTYL ACETATE	193	Neurotoxicity

TIER 1 RED LIST CHEMICAL OF CONCERN	NUMBER OF TIMES FLAGGED IN INGREDIENT ANALYSIS	ASSOCIATED HEALTH CONCERNS
ETHYL ACETATE	193	Neurotoxicity, eye irritation
BENZOPHENONE-1	156	Cancer, endocrine disruption, organ-system toxicity, allergic reactions
CARBON BLACK	155	Cancer, organ-system toxicity
DIAZOLIDINYL UREA (FORMALDEHYDE-RELEASING PRESERVATIVE)	117	Cancer, allergic reactions, skin irritation
DMDM HYDANTOIN (FORMALDEHYDE-RELEASING PRESERVATIVE)	108	Cancer, allergic reactions, skin irritation
SILOXANES	104	Endocrine disruption, skin irritation
TRIETHANOLAMINE (TEA)	89	Cancer, bioaccumulation, organ-system toxicity
SODIUM	28	Cancer, allergic reactions, skin irritation
BENZOPHENONE-3 OR OXYBENZONE	25	Cancer, endocrine disruption, organ-system toxicity, allergic reactions

See Appendix 6 for additional charts displaying the most frequently found Tier 1 Red List chemicals in each of the product categories we assessed.



Resources

One of the primary goals of the Non-Toxic Black Beauty Project was to develop trustworthy resources that Black women can use as a guide to make safer choices when purchasing beauty and personal care products. To do this, we transformed much of the guiding knowledge and findings from this project into user-friendly materials, available on the Non-Toxic Black Beauty Project webpage. We wanted the resources to be useful to our non-profit partners as well, so all Black Beauty resource art is available to our NGO partners to co-brand for their use.

These resources include:

- **Black Beauty Factsheet:** The project factsheet provides background information on the environmental injustice of Black beauty and citations to a wide range of scientific journal articles that speak to the problem. Organizational partners of the Campaign for Safe Cosmetics can use this factsheet to get an understanding of the Non-Toxic Black Beauty Project and the issues it aims to address.
- **Project One-Pager:** The project one-pager is a concise document designed to familiarize the public with key components of the Non-Toxic Black Beauty Project.
- **Tip Cards:** We created a series of tip cards that highlight the top toxic chemicals of concern found in various beauty product categories. These tip cards also include a list of brands from our Top Black-Owned Beauty Brands that make products within each category that do not contain these chemicals of concern.

- **Infographics:** We designed a variety of infographics that highlight the top toxic cosmetic ingredients to avoid, top products of concern, and top facts related to Black beauty. Individuals can use these tip cards to learn more about the environmental injustice of Black beauty and post on social media to raise awareness.
- **Top Toxic Chemicals by Product Category:** We created a public-facing document that quickly shows which Tier 1 Red List chemicals are commonly found in each category of Black beauty products. This resource can help consumers who want to avoid toxic chemicals when they're shopping for products.
- **Toxic Chemicals in Black Beauty Products:** This resource is a one-page document with a list of all the Tier 1 Red List chemicals that we found in Black beauty products through our safety screening of product ingredients and is a useful resource for both consumers and advocates. Retailers can also use it to prioritize which chemicals of concern they should eliminate from their private label brands and instruct the brands they carry to phase out of their products.
- **Annotated Bibliography:** The findings from our literature review are captured in our annotated bibliography, which includes 141 studies. This resource comprehensively documents the scientifically supported links between chemicals found in personal care products and negative health effects of greater concern for Black women.

See Appendix 7 for visuals and links to these project resources.





Conclusion

We know that challenging the role that an unregulated, profit-driven beauty industry plays in perpetuating racialized beauty standards is just one step toward addressing the environmental injustice of Black beauty and tackling racial injustice writ large.

As the Non-Toxic Black Beauty Project grows in visibility and stature, we hope it will elevate the Black-owned businesses that are leading the way in shaping a safer Black Beauty industry by making and selling the non-toxic products that Black women and girls want and deserve. We hope that by providing Black women with educational resources about the toxic chemicals in their products, it will provide them with the information they need to make more informed and safer purchases. We look forward to seeing a day when beauty and personal care product manufacturers prioritize removing toxic ingredients, resulting in better health outcomes for Black women and girls everywhere.

We look forward to seeing a day when beauty and personal care product manufacturers will prioritize removing toxic ingredients, resulting in **better health outcomes for Black women and girls everywhere.**

Moving forward with the Non-Toxic Black Beauty Project, we will emphasize providing technical support and assistance to Black-owned beauty brands that did not make our list of top non-toxic brands and want to do better. By leading with education and assistance, we hope to increase the number of brands creating safer, non-toxic Black beauty products. Also, we hope that the Non-Toxic Black Beauty Project will continue to energize Black women to demand safe beauty products from retailers and manufacturers—an important lever for the safe Black beauty industry's continued growth.

Federal policies and regulations should protect Black women from the toxic chemicals in the cosmetic products they use every day. Simply put, Black women should not have to be organic chemists to identify safe beauty and personal care products. Also, there should be more non-toxic beauty options on the market. We need strong federal cosmetic safety reform that puts policies in place that ban the use of chemicals linked to harm to people and the planet. Those policies should start with protecting the populations who have suffered most from the lack of these safety measures: women of color and professional salon workers.

After two decades, the Campaign for Safe Cosmetics continues to champion safer beauty for all, especially vulnerable populations like Black women and other women of color. In the absence of meaningful federal regulation of the \$100 billion cosmetics industry, we also continue to urge personal care product companies to voluntarily take the necessary steps to shift toward safer products. And encourage retailers to adopt our Red List as a “Do Not Use” list to guide their selection of safer, non-toxic Black beauty products and deselection of harmful products.

Ultimately, Black consumers should not bear responsibility for undoing the racialized beauty standards that have made toxic Black beauty products readily available everywhere from drug stores to high-end department stores. Every level of society that contributed to the history, continued reinforcement, and approval of racist, Eurocentric beauty standards has a role to play in undoing these practices. However, it will take a movement of concerned citizens, activists, advocates, and allies to reverse this, given these damaging beauty standards are so deeply entrenched.

The Campaign for Safe Cosmetics appreciates this opportunity to work with beauty justice advocates everywhere to steer the course of history toward safer beauty for all. Securing beauty justice will not happen overnight. Still, with the right combination of outrage, action, and resources, we are optimistic that the Non-Toxic Black Beauty Project will help move the needle toward making safer, cleaner, non-toxic Black beauty products the new normal.

■ Personal and Political Actions to Make Change

From the personal to the political, everyone has a role to play in getting toxic chemicals out of the beauty products that are threatening Black women’s health. Here are some actions you can take:

PERSONAL CHANGES:

- Just getting started? Check out this introductory blog on the issue: [Black is Beautiful: The Black Beauty Project](#), which contains 5 Tips for Safer Beauty.
- Do your research, read labels, and become a smart shopper!
- Support Black-owned, clean cosmetics companies that disclose fragrance ingredients.
- Avoid products with “fragrance” or “parfum” on the label.

- Use apps like Clearya, Think Dirty, and EWG's Healthy Living to help you choose products without the worst chemicals for yourself and your family.
- Visit www.safecosmetics.org to learn more about which chemicals and product types to avoid.

WHAT YOU CAN DO POLITICALLY: GET INVOLVED IN CHANGING THE SYSTEM SO EVERYONE IS PROTECTED!

- We can't shop our way out of the problem. We deserve a government that protects us regardless of where we shop, work, or live.
- Long-lasting, systemic policy change can happen at the local, state, or federal levels.
- Help pass the federal Safer Beauty Bill Package. Visit <https://www.safecosmetics.org/take-action/>

LEARN MORE ABOUT AND ALIGN YOURSELF WITH THE WORK OF OUR IMPORTANT PARTNER ORGANIZATIONS:

- [Black Women for Wellness](#)
- [Clean Beauty for Black Girls](#)
- [WE ACT for Environmental Justice: Empowering Communities to Power Change](#)
- [CA Black Health Network - Serving California's Black Community](#)

SHARE AND MAKE USE OF THESE HELPFUL RESOURCES:

- [Black Beauty Tips](#): Toxic Ingredients to avoid (tip card and PDF format)
- [Top 5 Safe Cosmetic Tips](#): Helpful tips to finding safer alternatives
- [Top Toxic Chemicals in Black Beauty Products](#): Top chemicals of concern to avoid by product category
- [Chemicals of Concern in Personal Care Products](#): Health and science info about chemicals of concern, plus tip cards for chemicals to avoid in beauty and personal care products
- [Non-Toxic Black Beauty Database](#): Products free of toxic chemicals, made and sold by Black-owned businesses
- [CSC's Top Non-Toxic Black-Owned Beauty Brand](#)

Appendices



Appendix 1.

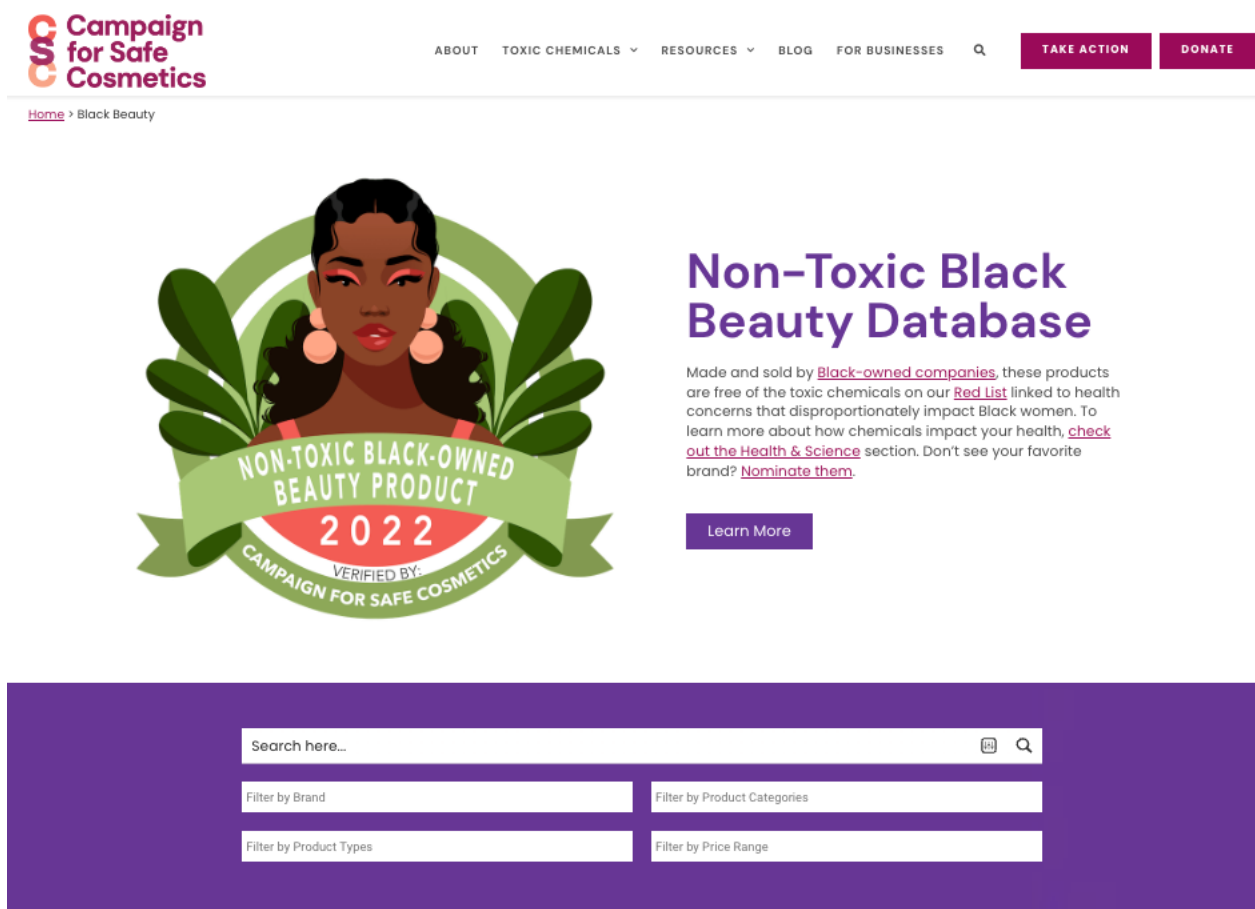
CSC's Top Black-Owned Beauty Brand and Searchable Database of Non-Toxic Black Beauty Products

Below are the companies included on CSC's List of Top Black-Owned Beauty Brands.

- | | |
|------------------------------|-----------------------------|
| 1. Girls with Curls | 27. Golde |
| 2. 54 Thrones | 28. Golden Roots Essentials |
| 3. Aba Love Apothecary | 29. Grn Goods |
| 4. AbsoluteJOI | 30. Holy Curls |
| 5. AcARRE | 31. hunnybunny Boutique |
| 6. Adeba Nature | 32. Hyper Skin |
| 7. Afro Hair & Skin Co. | 33. I See You Wellness |
| 8. Aja Naturals | 34. Inua Naturals |
| 9. Alchemy Body Shop | 35. Itadi |
| 10. Ami Colé | 36. Iwi Fresh |
| 11. Angie Watts | 37. IYOBA |
| 12. Bask and Bloom | 38. Jacq's |
| 13. Be Transcendent | 39. Jim & Henry |
| 14. Beneath Your Mask | 40. Junie Bees Butta |
| 15. BGLH Marketplace | 41. KAIKE |
| 16. Brown and Coconut | 42. Karité Shea Butter |
| 17. Chloe + Chad | 43. Kubra Kay Skincare |
| 18. CurlyCoilyTresses | 44. Kushae |
| 19. Dehiya Beauty | 45. Liha Beauty |
| 20. Dr Locs | 46. Limegreen |
| 21. EleVen by Venus Williams | 47. London Grant |
| 22. EPARA Skincare | 48. Loving Culture |
| 23. Eu'Genia | 49. Mary Louise Cosmetics |
| 24. Free + True Skincare | 50. Melanin Haircare |
| 25. Frigg | 51. Meraki Organics |
| 26. Gloryscent Beauty | 52. Midori Family |

- | | | | |
|-----|--------------------------|-----|---------------------|
| 53. | NAIWBE | 66. | Skin Scholars |
| 54. | Natural Hair Queen | 67. | Strandz |
| 55. | Natural Hair Restoration | 68. | Suki Naturals |
| 56. | Nuele Hair | 69. | The Balm Shop & Co. |
| 57. | Ode to Self | 70. | Topicals |
| 58. | Oui the People | 71. | Tropic Isle Living |
| 59. | Pholk Beauty | 72. | True Moringa |
| 60. | Praises Products | 73. | Uhai |
| 61. | Rosen Skincare | 74. | Undefined Beauty |
| 62. | Sabreen Cosmetics | 75. | Unsun Cosmetics |
| 63. | Shea Radiance | 76. | Urban Serenite |
| 64. | Shimirose | 77. | Vie Beauty |
| 65. | Sienna Naturals | 78. | Well Beauty Lab |

Below is a screenshot taken from the searchable Database of Non-Toxic Black Beauty Products.



Campaign for Safe Cosmetics

ABOUT TOXIC CHEMICALS RESOURCES BLOG FOR BUSINESSES TAKE ACTION DONATE

[Home](#) > Black Beauty

Non-Toxic Black Beauty Database

Made and sold by [Black-owned companies](#), these products are free of the toxic chemicals on our [Red List](#) linked to health concerns that disproportionately impact Black women. To learn more about how chemicals impact your health, [check out the Health & Science](#) section. Don't see your favorite brand? [Nominate them](#).

[Learn More](#)

NON-TOXIC BLACK-OWNED BEAUTY PRODUCT 2022 VERIFIED BY: CAMPAIGN FOR SAFE COSMETICS

Search here...

Filter by Brand Filter by Product Categories

Filter by Product Types Filter by Price Range

Appendix 2.

Keywords and Search Terms Used in the Scientific Literature Review

PubMed Search

#1	[list health endpoint MeSH terms and keywords here]
#2	<p>"Phthalic Acids"[Mesh] OR "Endocrine Disruptors"[Mesh] OR "Parabens"[Mesh] OR "Acrylates"[Mesh] OR "Butylated Hydroxytoluene"[Mesh] OR "Butylated Hydroxyanisole"[Mesh] OR "Formaldehyde"[Mesh] OR "Phenacetin"[Mesh] OR "Coal Tar"[Mesh] OR "Benzene"[Mesh] OR "Mineral Oil"[Mesh] OR "Ethylene Oxide"[Mesh] OR "Chromium"[Mesh] OR "Cadmium Compounds"[Mesh] OR "Cadmium"[Mesh] OR "Arsenic"[Mesh] OR "Quartz"[Mesh] OR "Perfume"[Mesh] OR "Thimerosal"[Mesh] OR "Cottonseed Oil"[Mesh] OR "Acetone"[Mesh] OR "Fullerenes"[Mesh] OR "4-Aminobenzoic Acid"[Mesh] OR "Petrolatum"[Mesh] OR "Acrylamide"[Mesh] OR "Polytetrafluoroethylene"[Mesh] OR "Benzoic Acid"[Mesh] OR "Triclosan"[Mesh] OR "Benzyl Alcohol"[Mesh] OR "Citric Acid"[Mesh] OR "Lactic Acid"[Mesh] OR "Sodium Salicylate"[Mesh] OR "Sorbic Acid"[Mesh] OR "Vitamin E"[Mesh] OR "Talc"[Mesh] OR "Toluene"[Mesh] OR "Placental Extracts"[Mesh] OR "Sodium Hydroxide"[Mesh] OR "Calcium Hydroxide"[Mesh] OR "Methylene Chloride"[Mesh] OR "Mercury"[Mesh] OR "endocrine disrupt*"[tw] OR EDCs[tw] OR paraben*[tw] OR phthalate*[tw] OR phenol*[tw] OR "perfluoroalkyl substance*"[tw] OR "perfluoro*"[tw] OR obesogen*[tw] OR "1,4-dioxane"[tw] OR acrylate*[tw] OR benzophenone*[tw] OR oxybenzone[tw] OR "butylated*"[tw] OR "carbon black"[tw] OR formaldehyde[tw] OR "quaternium-15"[tw] OR "diazolidinyl urea"[tw] OR "imidazolidinyl urea"[tw] OR "polyoxymethylene urea"[tw] OR "sodium hydroxymethylglycinate"[tw] OR "DMDM hydantoin"[tw] OR "2-bromo-2-nitropropane-1,3 diol"[tw] OR glyoxal[tw] OR phenacetin[tw] OR "coal tar"[tw] OR benzene[tw] OR "mineral oil*"[tw] OR "ethylene oxide"[tw] OR chromium[tw] OR cadmium[tw] OR arsenic[tw] OR "crystalline silica"[tw] OR quartz[tw] OR triethanolamine[tw] OR diethanolamine[tw] OR "cocamide*"[tw] OR "lauramide*"[tw] OR polysorbate[tw] OR laureth[tw] OR steareth[tw] OR cetareth[tw] OR fragrance[tw] OR parfum[tw] OR perfume[tw] OR homosalate[tw] OR "homomenthyl salicylate"[tw] OR hydroquinone[tw] OR "lead acetate"[tw] OR thimerosal[tw] OR "hydrogenated cottonseed oil"[tw] OR "sodium hexametaphosphate"[tw] OR methylisothiazolinone[tw] OR "2-methyl-4-isothiazoline-3-one"[tw] OR methylchlorisothiazolinone[tw] OR "5-chloro-2-methyl-4-isothiazoline-3-one"[tw] OR mica[tw] OR muscovite[tw] OR "isopropyl acetone"[tw] OR "methyl isobutyl ketone"[tw] OR hexone[tw] OR "2-pentanone"[tw] OR "methyl ethyl ketone"[tw] OR "2-butanone"[tw] OR "3-butanone"[tw] OR acetone[tw] OR "n-methyl-pyrrolidone"[tw] OR "n-methyl-2-pyrrolidone"[tw] OR "1-methyl-2-pyrrolidone"[tw] OR fullerenes[tw] OR "micronized zinc oxide"[tw] OR "nano zinc oxide"[tw] OR "micronized titanium dioxide"[tw] OR "micronized quartz silica"[tw] OR octinoxate[tw] OR parsol[tw] OR escalol[tw] OR "2-ethylhexyl p-methoxycinnamate"[tw] OR paba[tw] OR "padimate O"[tw] OR "4-aminobenzoic acid"[tw] OR "para-aminobenzoic acid"[tw] OR "p-aminobenzoic acid"[tw] OR "2-ethylhexyl ester"[tw] OR "p-carboxyaniline"[tw] OR petrolatum[tw] OR "petroleum jelly"[tw] OR "paraffin oil"[tw] OR phenoxyethanol[tw]</p>

#2	<p>OR polyacrylamide[tw] OR polyacrylate[tw] OR polyquaternium[tw] OR acrylamide[tw] OR acrylate[tw] OR polytetrafluoroethylene[tw] OR Teflon[tw] OR "p-phenylenediamine"[tw] OR "para-phenylenediamine"[tw] OR "4-aminoaniline"[tw] OR "1,4-benzenediamine"[tw] OR "p-diaminobenzene"[tw] OR "1,4-diaminobenzene"[tw] OR "1,4-phenylene diamine"[tw] OR benzylate[tw] OR "benzoic acid"[tw] OR "benzyl ester"[tw] OR triclosan[tw] OR triclocarban[tw] OR "benzyl alcohol"[tw] OR "benzalkonium chloride"[tw] OR "dehydroacetic acid"[tw] OR "citric acid"[tw] OR "essential oil"[tw] OR "grapefruit seed extract"[tw] OR "lactic acid"[tw] OR "levulinic acid"[tw] OR "potassium sorbate"[tw] OR "sodium dehydroacetate"[tw] OR "sodium metabisulfite"[tw] OR "sodium salicylate"[tw] OR "sorbic acid"[tw] OR "vitamin e"[tw] OR "zinc pyrithione"[tw] OR "benzethonium chloride"[tw] OR "cetrimonium bromide"[tw] OR styrene*[tw] OR polystyrene[tw] OR ethylbenzene[tw] OR vinylbenzene[tw] OR resorcin*[tw] OR "1,3-benzenediol"[tw] OR "1,3-dihydroxybenzene"[tw] OR "retinoic acid"[tw] OR "retinyl palmitate"[tw] OR retinol[tw] OR "retinyl acetate"[tw] OR tretinoin[tw] OR "musk ketone"[tw] OR "musk xylene"[tw] OR galaxolide[tw] OR tonalide[tw] OR talc[tw] OR "talcum powder"[tw] OR "titanium dioxide"[tw] OR toluene[tw] OR "beta hydroxy acid"[tw] OR coumarin[tw] OR "1,2-benzopyrone"[tw] OR "octoxynol-40"[tw] OR "PEG-10 sorbitan laurate"[tw] OR "placental extract"[tw] OR "selenium sulfide"[tw] OR "sodium hydroxide"[tw] OR "calcium hydroxide"[tw] OR cyclomethicone[tw] OR cyclosiloxane*[tw] OR acetonitrile[tw] OR "methacrylic acid"[tw] OR "ethyl methacrylate"[tw] OR "triphenyl phosphate"[tw] OR "methylene chloride"[tw] OR "ethyl cyanoacrylate"[tw] OR "tricresyl ethyl phthalate"[tw] OR "p-tert-butylphenol-formaldehyde"[tw] OR "thermoplastic resin"[tw] OR "toluene sulfonamide formaldehyde resin"[tw] OR xylene[tw] OR "butyl acetate"[tw] OR "ethyl acetate"[tw] OR "isopropyl alcohol"[tw] OR "potassium hydroxide"[tw] OR "methyl ethyl acetone"[tw] OR "di-n-butyl phthalate"[tw] OR "methylene glycol" OR propylparaben[tw] OR methylparaben[tw] OR butylparaben[tw] OR alkylphenol*[tw] OR "uv filter"[tw] OR mercury[tw] OR resorcinol[tw] OR "2,2-ethoxyethoxyethanol"[tw] OR "2-benzyloxyethanol"[tw] OR "phenethyl alcohol"[tw] OR "methyl ionone" OR "isobornyl acetate"[tw] OR hhcb[tw] OR "diphenyl ether"[tw] OR bucinol[tw] OR ahtn[tw] OR terpeneol[tw] OR "methyl salicylate"[tw] OR linalool[tw] OR limonene[tw] OR hexyl cinnemal[tw] OR eugenol[tw] OR benzylacetate[tw] OR "nonylphenol diethoxylate"[tw] OR "nonylphenol monoethoxylate"[tw] OR "4-t-nonylphenol"[tw] OR "octylphenol diethoxylate"[tw] OR "4-t-octylphenol"[tw] OR monoethanolamine[tw] OR "o-phenylphenol"[tw] OR "propylene glycol"[tw] OR "guanidine carbonate"[tw] OR "polyethylene glycol"[tw] OR glycerin[tw] OR "hexyl cinnamal"[tw] OR "benzyl benzoate" OR "guanidine hydroxide"[tw] OR cysteamine[tw] OR arbutin[tw] OR "kojic acid"[tw] OR camphor[tw] OR "azelaic acid"[tw] OR "tranexamic acid"[tw]</p> <p>OR «Cosmetics»[Mesh] OR cosmetic*[tw] OR "personal care product"[tw] OR "make-up"[tw] OR makeup[tw] OR beauty[tw] OR "nail polish"[tw] OR "acrylic nail"[tw] OR "skin lightening"[tw] OR "hair relaxer"[tw] OR "vaginal douche"[tw] OR "feminine care product"[tw] OR "hair oil"[tw] OR "root stimulator"[tw] OR shampoo[tw] OR conditioner[tw]</p>
#3	"African Americans"[Mesh] OR "African American"[tw] OR "Black"[tw] AND (female[filter]) OR women[tw] OR girl*[tw]
#4	"Nutritional Sciences"[Mesh] OR "Food"[Mesh] OR "Diet"[Mesh] OR nutrition*[tw] OR food[tw] OR diet*[tw]
#5	#1 AND #2 AND #3 NOT #4

Appendix 3.

BCPP's Updated Red List of Chemicals of Concern in Cosmetics

Below are screenshots taken from the updated Red List of Chemicals of Concern in Cosmetics.






Chemicals of Concern

TIER 1: "DO NOT USE" CHEMICALS LINKED TO HEALTH OUTCOMES OF GREATER CONCERN TO BLACK WOMEN

CAS Number	Chemical Name	PCP	FR	Diabetes	Early Puberty	Endometriosis	Infertility	Less Successful IVF Outcomes	Maternal Health	Obesity	Ovarian Cancer
100-42-5	Styrene (Cinnamene)	○	○						○		
91-20-3	Naphthalene	○	○						○		
119-61-9	Benzophenone	○	○			○				○	
25154-52-3	Nonylphenol		○	○					○		
131-57-7	Oxybenzone BP-3 Benzophenone-3	○	○		○	○	○	○		○	

CAS Number	Chemical Name	PCP	FR	Diabetes	Early Puberty	Endometriosis	Infertility	Less Successful IVF Outcomes	Maternal Health	Obesity	Ovarian Cancer
75-21-8	Ethylene Oxide	○							○		
7440-38-2	Arsenic	○		○			○	○	○		
71-43-2	Benzene	○					○	○	○		
335-67-1	Perfluorooctanoic Acid (PFOA)	○		○		○	○	○	○	○	
7440-02-0	Nickel (Metallic)	○		○					○	○	
7439-92-1	Lead & Lead compounds, Lead Acetate	○					○	○	○		
7439-97-6	Mercury (elemental)	○		○			○	○	○	○	
108-88-3	Toluene	○							○		

Appendix 4.

Annotated Bibliography

Below is a screenshot taken from the Annotated Bibliography that was created with the findings from our Literature Search. (Access the [full bibliography](#))

Annotated Black Beauty List

Abstract

The Annotated Black Beauty List is compiled of 141 references that investigate the link between known and emerging environmental toxicants and human health risks. The sources in this list span from 1989, when environmental exposures gained widespread attention with the implementation of the Clean Air and Water Act, to 2021, a year in which the exposure to toxic chemicals through personal care products emerged as a more pressing concern. The studies within this list are categorized by chemical tier (“prohibited” and “emerging”) and health conditions, including diabetes, puberty, endometriosis, fertility, menopause, maternal health, obesity, cancer, preterm birth, polycystic ovarian syndrome, preterm birth, fibroids, and allergies. Within each group, the APA style source is listed, and directly under the source is a short synopsis about the goal and results of the study. Out of the 141 papers, 26 investigate diabetes, 8 investigate changes to puberty, 4 investigate endometriosis, 11 investigate changes to fertility, 4 investigate changes to menopause, 43 investigate impacts on maternal health, 9 investigate obesity, 11 investigate cancer, 1 investigates PCOS, 7 investigate preterm birth, 5 investigate uterine fibroids and 2 investigate allergies. Note these totals sum the studies designated under Tier 1 and Tier 2.

Tier 1: Prohibited Chemicals

Diabetes (23):

Ashley-Martin, J., Dodds, L., Arbuckle, T. E., Bouchard, M. F., Shapiro, G. D., Fisher, M., Monnier, P., Morisset, A. S., & Ettinger, A. S. (2018). Association between maternal urinary speciated arsenic concentrations and gestational diabetes in a cohort of Canadian women. *Environment international*, 121(Pt 1), 714–720. <https://doi.org/10.1016/j.envint.2018.10.008>

Ashley-Martin et al studied the association between arsenic and gestational diabetes using data from the maternal-infant research on environmental chemicals cohort. The group reported that a metabolite of arsenic, dimethylarsenic acid, was associated with gestational diabetes [1].

Grau-Perez, M., Kuo, C. C., Gribble, M. O., Balakrishnan, P., Jones Spratlen, M., Vaidya, D., Francesconi, K. A., Goessler, W., Guallar, E., Silbergeld, E. K., Umans, J. G., Best, L. G., Lee, E. T., Howard, B. V., Cole, S. A., & Navas-Acien, A. (2017). Association of Low-Moderate Arsenic Exposure and Arsenic Metabolism with Incident Diabetes and Insulin Resistance in the Strong Heart Family Study. *Environmental health perspectives*, 125(12), 127004. <https://doi.org/10.1289/EHP2566>

Grau-Perez et al evaluated the prospective association between arsenic exposure and metabolism in persons with type 2 diabetes and insulin resistance. The group reported that arsenic exposure was associated with incidence of diabetes [2].

Appendix 5.

Authoritative Lists Cited in the Red List and a Discussion on Tier 1 Red List Chemicals with Special Circumstances

Authoritative lists used to identify the Tier 1 chemicals of concern included in our Red List are as follows:

CARCINOGENS

Agents Classified by the International Agency for Research on Cancer (IARC) Monographs

- IARC Group 1: Known Human Carcinogen
- IARC Group 2A: Probably Human Carcinogen
- IARC Group 2B: Possible Human Carcinogen

National Toxicology Program Report on Carcinogens

- NTP Known: Known Human Carcinogen
- NTP RA: Reasonably Anticipated to Be a Human Carcinogen

EU Globally Harmonized System

- GHS H350: May Cause Cancer
- GHS H351: Suspected of Causing Cancer

California Proposition 65 Listed Chemicals

- Prop 65 Chemicals Known to the State of California to cause cancer

US Environmental Protection Agency (EPA) Integrated Risk Information System (IRIS)

ChemSec Substitute It Now! (SIN) List

MAMMARY GLAND CARCINOGENS

EU Strategy for Endocrine Disruptors

- EU ED Category 1: Substances for which endocrine activity has been documented in at least one study of a living organism. These substances are given the highest priority for further studies.
- EU ED Category 2: Substances without sufficient evidence of endocrine activity, but with evidence of biological activity relating to endocrine disruption

EU Candidate List of Substances of Very High Concern (SVHC) for Authorization

ChemSec Substitute It Now! (SIN) List

International Panel on Chemical Pollution (IPCP)

REPRODUCTIVE/DEVELOPMENTAL TOXICANTS

EU Globally Harmonized System

- GHS H361: Suspected of Damaging Fertility or the Fetus
- GHS H361d: Suspected of Damaging the Fetus
- GHS H361f: Suspected of Damaging Fertility

California Proposition 65 Listed Chemicals

- Prop 65: Developmental
- Prop 65-f: Developmental – female
- Prop 65-m: Developmental – male
- Prop 65-f,m: Developmental – male, female

Nominated for Study NIH

- National Toxicology Program (NTP)-R: Reproductive Toxicity
- NTP-D: Developmental Toxicity

EU Candidate List of Substances of Very High Concern (SVHC) for Authorization

NEUROTOXIC CHEMICALS

EU Globally Harmonized System

- GHS H336: May Cause Drowsiness or Dizziness

RESPIRATORY/ASTHMAGENS

EU Globally Harmonized System

- GHS H334: May Cause Allergy or Asthma Symptoms or Breathing Difficulties if Inhaled

Association of Occupational and Environmental Clinics (AOEC)

- AOEC R – Suspected Asthmagen
- AOEC Rs – Asthmagen, Sensitizer
- AOEC Rr – RADS: Reactive Airway Dysfunction Syndrome
- AOEC G – Generally Accepted Asthmagen

SKIN IRRITATION

EU Globally Harmonized System

- GHS H318: Causes Serious Eye Damage
- GHS H319: Causes Serious Eye Irritation

New Zealand Globally Harmonized System

- GHS 6.4A: Causes Eye Irritation (Category 2)

CHRONIC AQUATIC TOXICITY

EU Globally Harmonized System

- GHS H410: Very Toxic to Aquatic Life with Long-Lasting Effects
- GHS H411: Toxic to Aquatic Life with Long-Lasting Effects
- GHS H412: Harmful to Aquatic Life with Long-Lasting Effects
- GHS H413: May Cause Long Lasting Harmful Effects to Aquatic Life

New Zealand Globally Harmonized System

- GHS 9.1A: Hazardous to the Aquatic Environment Acute (Category 1); Hazardous to the Aquatic Environment Chronic (Category 1)
- GHS 9.1C: Hazardous to the Aquatic Environment Chronic (Category 3)
- GHS 9.1D: Hazardous to the Aquatic Environment Chronic (Category 4)

Canadian Environmental Protection Act (CEPA) Environmental Registry – Domestic Substances List (DSL)

PERSISTENT, BIOACCUMULATIVE & TOXIC (PBT)

OSPAR PBT: Chemicals for Priority Action

EU Candidate List of Substances of Very High Concern (SVHC) for Authorization

FRAGRANCE INGREDIENTS

International Fragrance Association List

- Ingredients linked to adverse health effects that appear on IFRA's transparency list, a list of the ingredients used to create fragrance mixtures used in personal care products, and fine fragrance worldwide.

DTSC LIST

California Department of Toxic Substance Control Candidate Chemicals List

- This list is made up of chemicals identified in the Safer Consumer Products Regulations (California Code of Regulations (CCR), Title 22, Division 4.5, Chapter 55, Section 69502.2) and was drawn from 23 authoritative lists. The authoritative lists fall into two categories: lists based on hazard traits (15 lists), and lists based on potential exposure concerns (8 lists).

TIER 1 SPECIAL CIRCUMSTANCES AND CLASSES OF CHEMICALS OF CONCERN TO AVOID IN COSMETICS

We are recommending against the use of certain classes of chemicals of concern given the similar chemical structure and predicted biological activity. The class-based approach helps to minimize regrettable substitutions, where one toxic chemical is replaced with a similar or more toxic alternative. These chemicals include:

PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES (PFAS, OR PFAS CHEMICALS)

PFAS are a class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom. The Agency for Toxic Substances and Disease Registry (ATSDR) states PFAS exposures may lead to increased cholesterol levels, decreased vaccine response in children, changes in liver enzymes, increased risk of high blood pressure or pre-eclampsia in pregnant women, small decreases in infant birth weights, and an increased risk of kidney or testicular cancer.¹ Several states have banned or restricted the use of PFAS in cosmetics, including Maine, California, and Maryland, and efforts are currently underway to ban PFAS from cosmetics at the national level.² The entire class of PFAS chemicals should be avoided for use in cosmetics. See the “Tier 1_PFA” tab for a list of the most prevalent PFAS chemicals currently being used in cosmetics.

FORMALDEHYDE-RELEASING PRESERVATIVES (FRPs)

FRPs include any chemical that slowly releases formaldehyde to preserve a personal care or beauty product. Formaldehyde is a Tier 1 chemical. See the “Tier 1_FRPs” tab for a list of FRPs that should be avoided in cosmetics.

1 <https://www.atsdr.cdc.gov/pfas/health-effects/index.html>

2 <https://www.ehn.org/pfas-in-makeup-2656887006.html>

ORTHO-PHTHALATES

Ortho-phthalate is a class of chemicals that are esters of ortho-phthalic acid. This chemical class is known to have hormone-disrupting properties, and links have been found between ortho-phthalates and interference with fetal development, abnormalities in the male reproductive system, damage to DNA in sperm, reduced testosterone levels and altered thyroid hormone production, neurodevelopmental effects in infants or children, liver and kidney toxicity, cancer, and asthma.³ See the “Tier 1_OPhthalates” tab for a list of ortho-phthalates that should be avoided in cosmetics.

METHYL METHACRYLATE (MMA) (CAS NO. 80-62-6)

As of 2007, 30 states have registered or banned the use of liquid methyl methacrylate monomer. Methyl methacrylate monomer is an ingredient used in some artificial nail products which bond strongly with the nail. In the early 1970s, the FDA removed nail products containing 100 percent MMA from the market, and in 2015, California’s Board of Barbering and Cosmetology (BBC) prohibited the use of MMA-containing nail products in licensed hair and nail salons and cosmetology schools through regulation. Despite these regulatory actions, MMA continues to be detected in indoor air in nail salons. MMA exposure has been linked to adverse health effects including dermal toxicity and respiratory tract effects.⁴ NIOSH lists MMA as IDLH (immediately dangerous to life or health).

PHENOL (CAS NO. 108-95-2)

Phenol is prohibited in cosmetics in Europe and in Canada.

CYCLOPENTASILOXANE (CAS NO. 541-02-6)

According to the EU Scientific Committee on Consumer Safety: considered unsafe for use in hair styling aerosols and sun care spray products. In addition, this ingredient may contain traces of Cyclotetrasiloxane (D4), which is classified in the EU as toxic to reproduction, and a hormone disruptor.⁵

3 <https://toxicfreefuture.org/toxic-chemicals/phthalates/#section3>

4 <https://dtsc.ca.gov/scp/nail-products-containing-mma/>

5 https://health.ec.europa.eu/system/files/2021-08/sccs_o_174_0.pdf

ALOE BARBADENSIS LEAF EXTRACT (ALOE VERA) (CAS NO. 85507-69-3)

Aloe Vera leaf extract is listed as a Tier 2 chemical despite having health effects noted by an authoritative list. Aloe Vera leaf extract is a possible human carcinogen according to IARC.⁶ This refers to the whole leaf extract, which includes the aloe vera gel, leaf pulp (the layer just inside the green rind), and the latex which runs through tubes in the leaf pulp. The studies identifying this chemical as a possible human carcinogen only assess oral ingestion, with no studies looking at skin absorption. Therefore, Aloe Vera should be avoided in products that could be ingested (lip balms, lip glosses, lip scrubs, etc.), but can otherwise be used.

PETROLATUM (CAS NO. 8009-03-8)

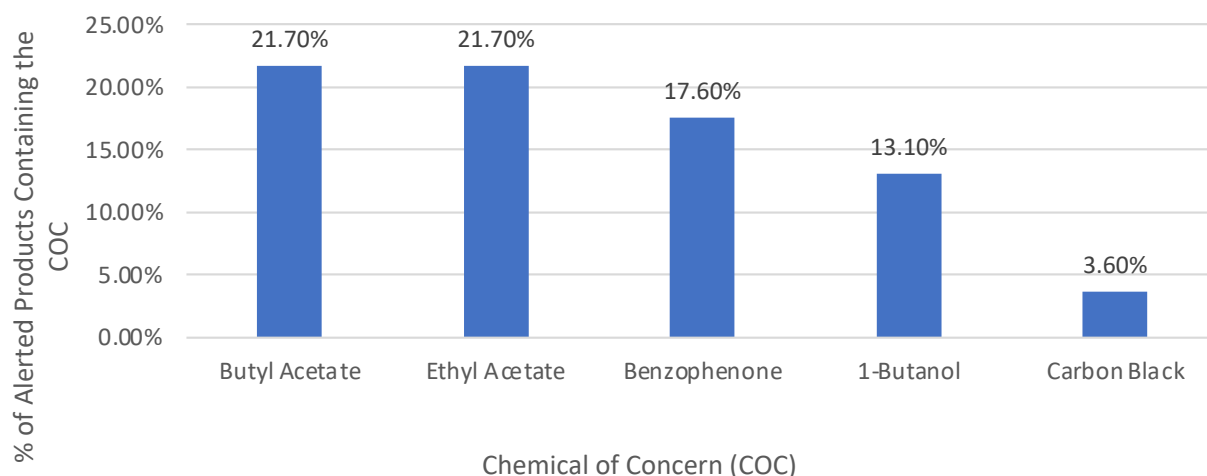
Petrolatum is listed as a Tier 2 chemical despite having a GHS H361d hazard classification. Petrolatum is considered safe when it is refined, and only presents a hazard if contaminated with polycyclic aromatic hydrocarbons (PAHs).

6 <https://monographs.iarc.who.int/wp-content/uploads/2018/06/mono108-01.pdf>

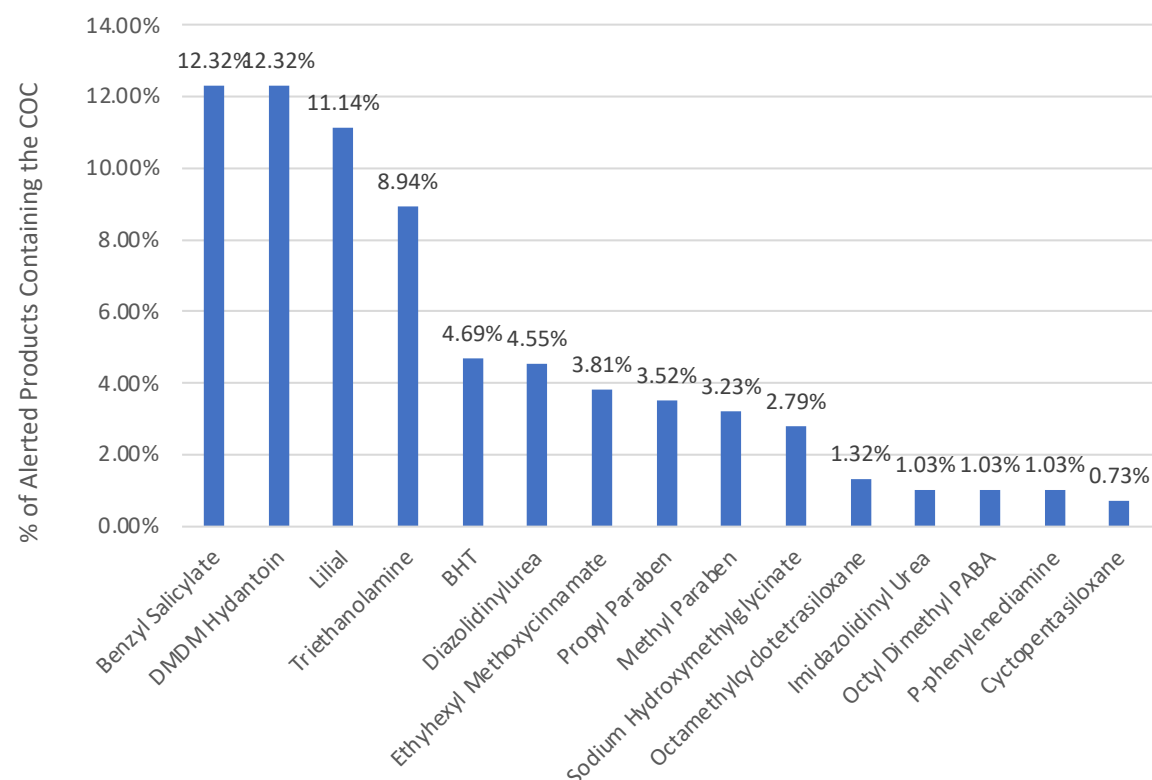
Appendix 6.

Most Frequently Found Tier-1 Red List Chemicals by Black Beauty Product Category

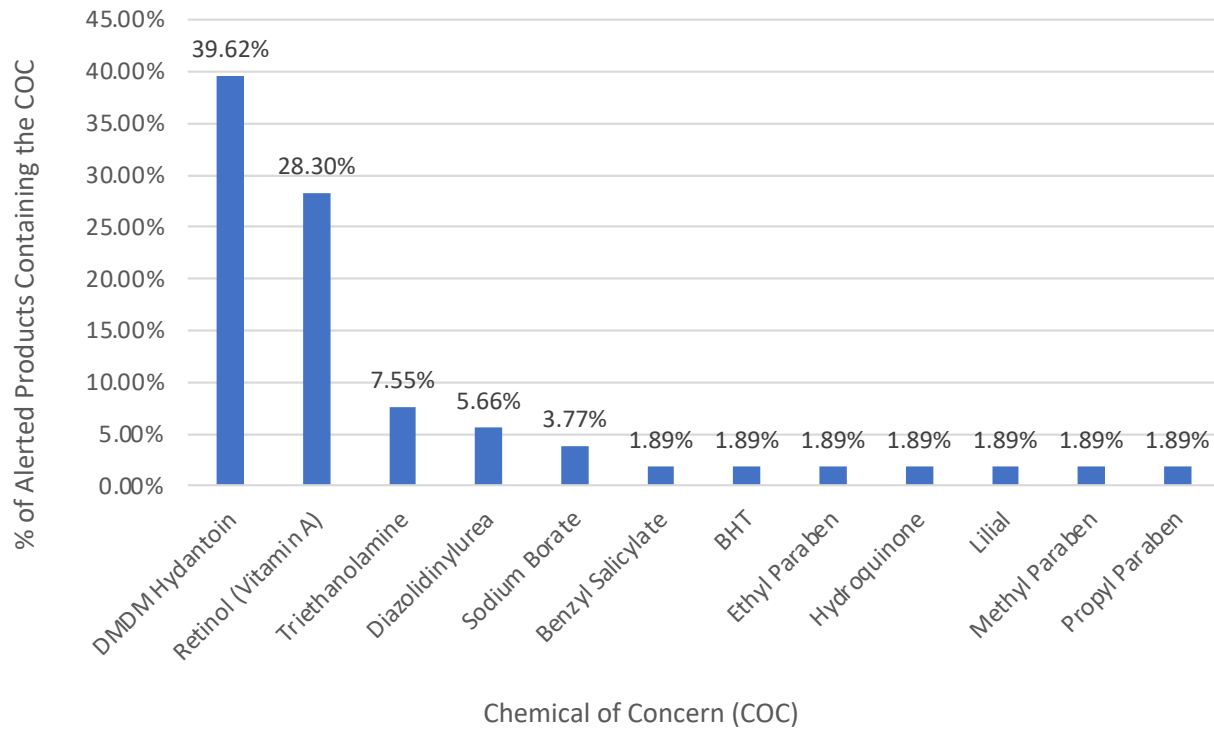
Top Chemicals of Concern in Black Nail Products



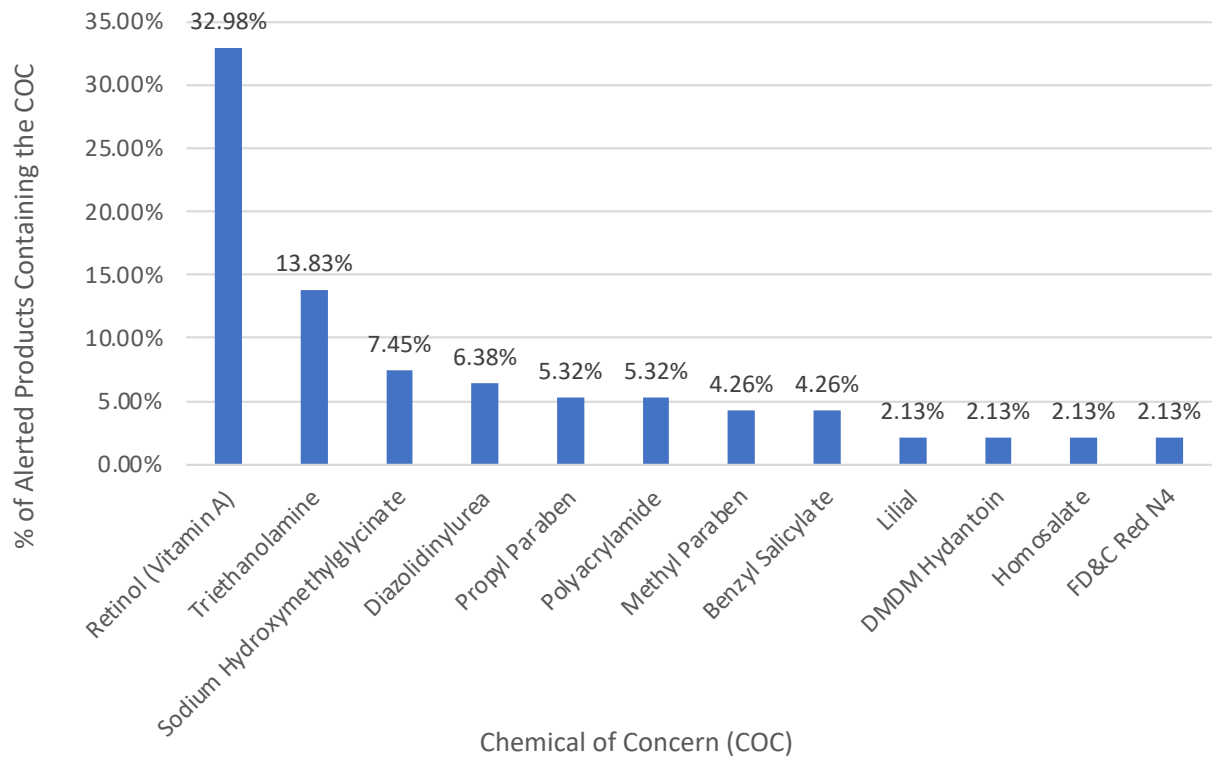
Top Chemicals of Concern in Black Haircare Products



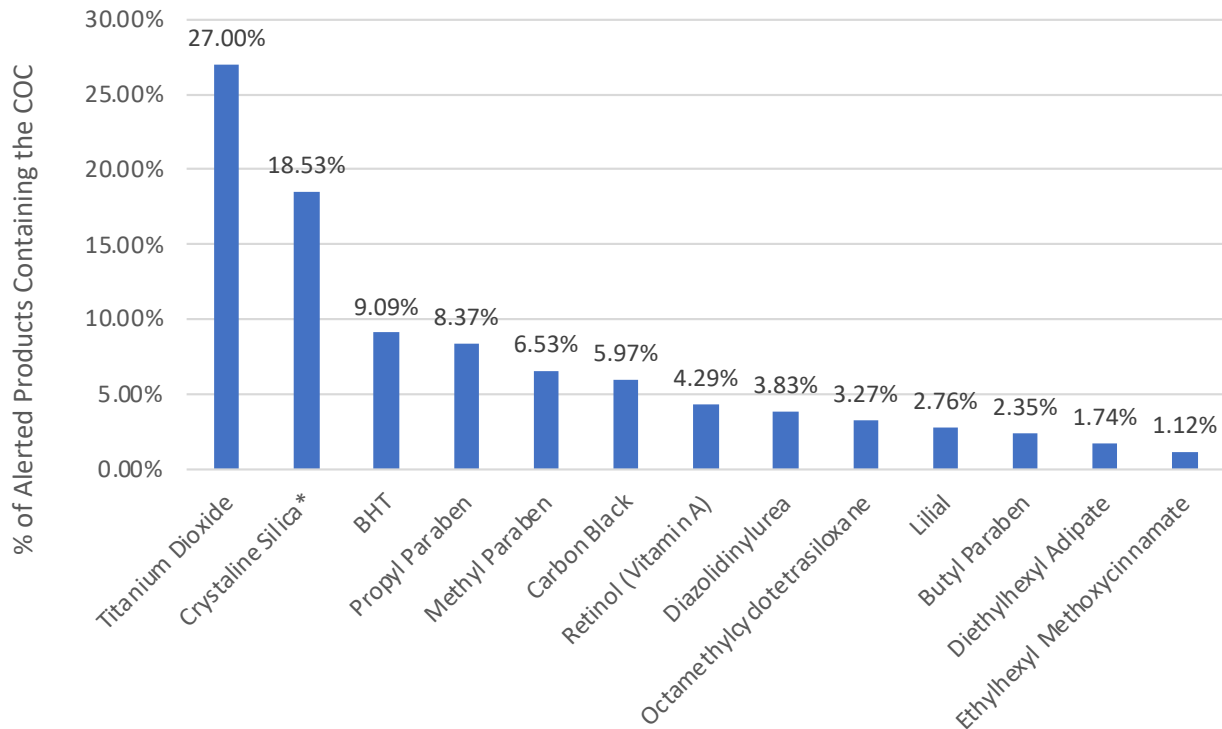
Top Chemicals of Concern in Black Bodycare Products



Top Chemicals of Concern in Black Skincare Products

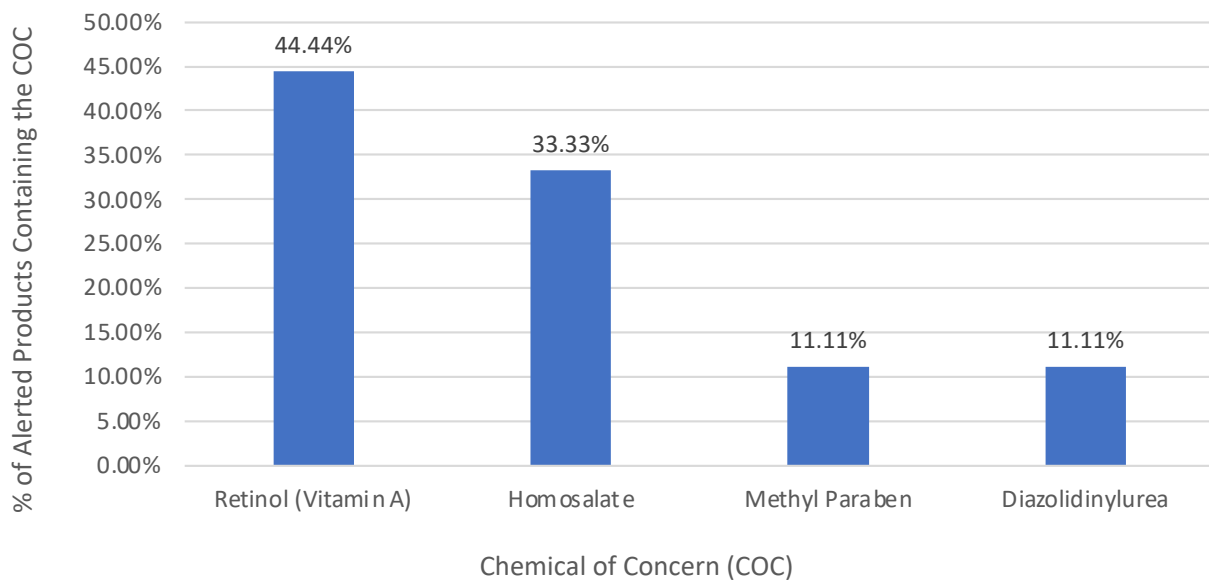


Top Chemicals of Concern in Black Makeup Products



Chemical of Concern (COC) (*indicates inhalable form only)

Top Chemicals of Concern in Black Sunscreen Products



Appendix 7.

Non-Toxic Black Beauty Project Resources

Below is a screenshot taken from the Black Beauty Factsheet.



Black women are often surprised to learn that it's perfectly legal for companies to use ingredients linked to cancer, hormone disruption, and reproductive harm in the hair relaxers, nail products and other beauty and personal care products they use every day. The good news is that Black-owned businesses are leading the way by making safer products, specially designed for Black women, and Black consumers are advocating for change.



Below is a screenshot taken from the Project One-Pager.

The image is a screenshot of a Project One-Pager. It features the Black Beauty Project logo on the left, which includes the text "THE NON-TOXIC" and "BLACK BEAUTY PROJECT" around an illustration of four Black women. To the right of the logo is a purple box with white text that reads: "BCPP's Campaign for Safe Cosmetics is tackling the environmental injustice of the beauty industry with our top list of 80 Black-owned beauty brands and a 700+ non-toxic beauty product database that Black women can trust." Below this is an orange box with white text that reads: "The products on our list are made and sold by Black-owned companies committed to safer beauty and personal care products—free of the toxic chemicals linked to health concerns that negatively impact Black women." At the bottom is a blue box with white text that reads: "BACKGROUND INFO".

CSC's Non-Toxic Black Beauty Project is guided by an Advisory Committee made of representatives from leading nonprofit organizations and scientists working to address the over-exposure Black women experience to unsafe ingredients in the beauty and personal care products they use every day. For Black women, this issue is especially urgent because they face the highest rate of breast cancer mortality than any U.S. racial or ethnic group.

Below are screenshots of a sample of the tip cards we created.



INGREDIENTS TO AVOID

BODY CARE

- MDM hydantoin
- Tri Ethanol Amine Quat (Teaq): triethanolamine
- Diazolidinylurea
- Sodium Borate
- Benzyl Salicylate; Benzoic acid, 2-hydroxy-, phenylmethyl ester
- Butylated hydroxytoluene (BHT)
- Ethyl paraben

TOP CSC VERIFIED BLACK-OWNED BRANDS
without these harmful chemicals:

- 54 THRONES
- AJA NATURALS
- ALCHEMY BODY SHOP
- ANGIE WATTS
- THE BALM SHOP & CO.
- CHLOE - CHAD
- GOLDEN ROOTS ESSENTIALS
- IWI FRESH
- SHIMIROSE
- URBAN SERENITE

TOP BLACK-OWNED BEAUTY BRAND 2022
CAMPAIGN FOR SAFE COSMETICS



INGREDIENTS TO AVOID

HAIR CARE

- Benzyl Salicylate; Benzoic acid, 2-hydroxy-, phenylmethyl ester
- MDM hydantoin
- Lilial
- Tri Ethanol Amine Quat (Teaq): triethanolamine
- Isopropanol
- Butylated hydroxytoluene (BHT)
- Diazolidinylurea

TOP CSC VERIFIED BLACK-OWNED BRANDS
without these harmful chemicals:

- 2 GIRLS WITH CURLS
- BASK AND BLOOM
- DR LUGS
- JIM & HENRY
- MELANIN HAIRCARE
- SHEA RADIANCE
- SIENNA NATURALS
- SUKI SUKI NATURALS
- MERAKI ORGANICS
- UHA!

TOP BLACK-OWNED BEAUTY BRAND 2022
CAMPAIGN FOR SAFE COSMETICS

Below are screenshots from some of the infographics we created.



Buying Power
Black women purchase **\$7.5 B** of beauty products a year

Hair Purchases
9x more purchases of hair care products than any other demographic

Straighteners
30% more likely to develop breast cancer for Black women who use chemical hair straighteners

Hair dye
60% higher risk of breast cancer for Black women who regularly dye their hair

CSC Campaign for Safe Cosmetics



Top Toxic Cosmetic Ingredient to Avoid

UV Filters
(Benzophenone, Oxybenzone, Homosalate, Octinoxate, Avobenzone)

FOUND:

- Sunscreen
- Nail products
- Anti-frizz, hair lotions, Leave-in conditioners, hot oil
- Make-up
- Baby care products

HEALTH HARMS:

- Endocrine disruption
- Developmental harm

CSC Campaign for Safe Cosmetics

Below is a screenshot of the Top Toxic Chemicals by Product Category document.

Red List Chemical	Product Category					
	Bodycare	Haircare	Makeup	Nail Products	Skincare	Sunscreen
Benzophenone-1						
Benzophenone-2						
Butylated Hydroxyanisole (BHA)						
Butylated Hydroxytoluene (BHT)						
Butyl Acetate						

Below is a screenshot from the Toxic Chemicals in Black Beauty Products document.

These Red List chemicals of concern were found in **25%** of the nearly 8,000 Black beauty and personal care products we evaluated in 2021-2022.

1. <u>Titanium Dioxide (inhalable form)</u>	27. <u>Polyacrylamide</u>
2. <u>Silica (inhalable form)</u>	28. <u>Triphenyl Phosphate (TPP)</u>
3. <u>Retinol (Vitamin A)</u>	29. <u>p-Phenylenediamine</u>
4. <u>Butylated Hydroxytoluene (BHT)</u>	30. <u>Ethylhexyl Dimethyl PABA</u>
5. <u>Propylparaben</u>	31. <u>Homosalate</u>
6. <u>Butyl Acetate</u>	32. <u>FD&C Red n4</u>
7. <u>Ethyl Acetate</u>	33. <u>Sodium Borate</u>
8. <u>Methylparaben</u>	34. <u>Resorcinol</u>
9. <u>Benzophenone-1</u>	35. <u>Polytetrafluoroethylene (PTFE)</u>
10. <u>Carbon Black</u>	36. <u>Naphtha-Petroleum</u>
11. <u>Butylphenyl Methylpropional</u>	37. <u>Benzaldehyde</u>
12. <u>Diazolidinyl Urea</u>	38. <u>Butylated Hydroxyanisole (BHA)</u>
13. <u>n-Butyl Alcohol</u>	39. <u>Chromium Oxide</u>
14. <u>Benzyl Salicylate</u>	40. <u>Didecylidimonium Chloride</u>
15. <u>DMDM Hydantoin</u>	41. <u>Isoeugenol</u>
16. <u>Triethanolamine (TEA)</u>	42. <u>Benzophenone-2</u>
17. <u>Cyclotetrasiloxane</u>	43. <u>Methyl Methacrylate</u>
18. <u>Ethylhexyl Methoxycinnamate</u>	44. <u>Propanol</u>
19. <u>Butylparaben</u>	45. <u>Perfluorooctyl Triethoxysilane</u>
20. <u>Dioctyl Adipate</u>	46. <u>Acetaldehyde</u>
21. <u>Sodium Hydroxymethylglycinate</u>	47. <u>Hydroquinone</u>
22. <u>Benzophenone-3 or Oxybenzone</u>	48. <u>Triclosan</u>
23. <u>Ethylparaben</u>	49. <u>Cocamide DEA</u>

Endnotes

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