



The 'Toxic Twenty' Cosmetic Ingredients and Contaminants

Chemicals and contaminants linked to cancer can be found in many everyday products. However, no category of consumer products is subject to less government oversight than cosmetics and other personal care products. Although many of the chemicals and contaminants in cosmetics likely pose little risk, exposure to some chemicals and contaminants used in cosmetics and other personal care products has been linked to serious health problems, including cancer. Under the California Safe Cosmetics Act of 2005, 595 cosmetics manufacturers have reported using 88 chemicals that have been linked to cancer, birth defects, or reproductive harm in more than 73,000 products since 2009. Nevertheless, the Food and Drug Administration has banned or restricted only nine chemicals for safety reasons. Here are 20 chemicals or contaminants – the Toxic Twenty – that should finally be banned from our personal care products.

Ingredient/ Contaminant	Health Concerns	Countries or Intergovernmental Organizations with Bans or Restrictions in Personal Care Products	Retailers With Bans or Restrictions	Function in Personal Care Products	Number of Products in Use in Skin Deep® (as of 3/12/19)
Formaldehyde	Formaldehyde is <u>carcinogenic</u> ; it also causes <u>allergic reactions</u> and <u>irritates</u> the eyes and respiratory system.	Banned: <ul style="list-style-type: none"> • <u>Japan – ban on formalin (aqueous formaldehyde)</u> Restricted: <ul style="list-style-type: none"> • <u>EU</u> • <u>ASEAN</u> • <u>Canada</u> • <u>Australia</u> 	Scheduled ban for store brand products: <ul style="list-style-type: none"> • <u>CVS</u> • <u>Rite Aid</u> • <u>Target</u> • <u>Walgreens</u> Currently banned from any body care product: <ul style="list-style-type: none"> • <u>Whole Foods</u> 	Formaldehyde is used as a hair straightener, nail hardener and preservative.	<u>8</u>



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<p>Formaldehyde releasers</p>	<p>Formaldehyde releasers can have health effects similar to those of formaldehyde.</p>	<p>Certain formaldehyde releasers are restricted by:</p> <ul style="list-style-type: none"> • EU • ASEAN • Canada 	<p>Scheduled ban for certain formaldehyde releasers in store brand products:</p> <ul style="list-style-type: none"> • CVS • Rite Aid* • Target • Walgreens <p>Certain formaldehyde releasers are currently banned from any body care product:</p> <ul style="list-style-type: none"> • Whole Foods 	<p>Formaldehyde releasers are chemicals that release formaldehyde over time. They are used as preservatives.</p>	<p>Number not available</p>
<p>Dibutyl phthalate</p>	<p>Dibutyl phthalate is an endocrine disruptor and a <u>developmental toxicant</u> that harms male reproductive system development. It can <u>cause early puberty in boys</u> and other changes in the reproductive system.</p>	<p>Banned:</p> <ul style="list-style-type: none"> • EU • ASEAN • Australia 	<p>Scheduled ban for store brand products:</p> <ul style="list-style-type: none"> • CVS • Rite Aid • Target • Walgreens <p>Currently banned from any body care product:</p> <ul style="list-style-type: none"> • Whole Foods 	<p>Dibutyl phthalate is used as a solvent and fixative in perfumes, and as a plasticizer in nail polish.</p>	<p><u>7</u></p> <p><u>Also, may be included as an undisclosed fragrance chemical.</u></p>



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<p>Diethylhexyl phthalate</p>	<p>Diethylhexyl phthalate harms the reproductive system and can affect the developing fetus. It is a potential endocrine disruptor and has been classified by the International Agency for Research on Cancer as possibly carcinogenic to humans.</p>	<p>Banned:</p> <ul style="list-style-type: none"> • EU • ASEAN • Canada • Australia 	<p>Scheduled ban for store brand products:</p> <ul style="list-style-type: none"> • CVS • Rite Aid* • Target • Walgreens <p>Currently banned from any body care product:</p> <ul style="list-style-type: none"> • Whole Foods 	<p>Diethylhexyl phthalate is used in eyelash adhesive and in fragrances.</p>	<p><u>May be included as an undisclosed fragrance chemical.</u></p>
<p>Mercury and related compounds, including thimerosal</p>	<p>Mercury is a heavy metal that is absorbed through the skin. Mercury can damage the kidney and impact the nervous system. It is especially harmful to the developing fetus.</p>	<p>Banned:</p> <ul style="list-style-type: none"> • EU • ASEAN • Canada • Japan <p>Thimerosal preservative allowed in eye products (up to max. concentration of 70 parts per million, or ppm):</p> <ul style="list-style-type: none"> • EU • ASEAN <p>Mercury as a preservative allowed in eye products (up to 65 ppm). Unavoidable trace contamination of mercury in any product cannot be greater than 1 ppm:</p> <ul style="list-style-type: none"> • U.S. FDA 	<p>Mercury is presumed to be limited per FDA.</p>	<p>Mercury is used as a skin lightener. Some preservatives, like thimerosal, contain mercury and are still allowed.</p>	<p><u>No current formulations use thimerosal, but mercury was recently detected in skin creams through testing.</u></p>



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<p>Isobutylparaben</p>	<p>Isobutylparaben is an <u>endocrine disruptor</u> that can harm male reproductive system development.</p>	<p>Banned:</p> <ul style="list-style-type: none"> • <u>EU</u> • <u>ASEAN</u> <p>Restricted:</p> <ul style="list-style-type: none"> • <u>Japan</u> 	<p>Scheduled ban for store brand products:</p> <ul style="list-style-type: none"> • <u>CVS</u> • <u>Rite Aid*</u> • <u>Target</u> • <u>Walgreens</u> <p>Currently banned from any Premium body care product:</p> <ul style="list-style-type: none"> • <u>Whole Foods</u> 	<p>Isobutylparaben is a preservative.</p>	<p><u>285</u></p>
<p>Isopropylparaben</p>	<p>Isopropylparaben is an <u>endocrine disruptor</u> that can mimic estrogen.</p>	<p>Banned:</p> <ul style="list-style-type: none"> • <u>EU</u> • <u>ASEAN</u> <p>Restricted:</p> <ul style="list-style-type: none"> • <u>Japan</u> 	<p>Scheduled ban for store brand products:</p> <ul style="list-style-type: none"> • <u>CVS</u> • <u>Rite Aid*</u> • <u>Target</u> • <u>Walgreens</u> <p>Currently banned from any Premium body care product:</p> <ul style="list-style-type: none"> • <u>Whole Foods</u> 	<p>Isopropylparaben is a preservative.</p>	<p><u>47</u></p>
<p>Butylparaben</p>	<p>Butylparaben is an <u>endocrine disruptor</u> that can harm male reproductive system development.</p>	<p>Restricted:</p> <ul style="list-style-type: none"> • <u>EU</u> • <u>ASEAN</u> • <u>Japan</u> 	<p>Scheduled ban for store brand products:</p> <ul style="list-style-type: none"> • <u>CVS</u> • <u>Rite Aid</u> • <u>Target</u> 	<p>Butylparaben is a preservative.</p>	<p><u>586</u></p>



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			Currently banned from any Premium body care product: <ul style="list-style-type: none"> • Whole Foods 		
Propylparaben	Propylparaben is an endocrine disruptor that can mimic estrogen.	Restricted: <ul style="list-style-type: none"> • EU • ASEAN • Japan 	Scheduled ban for store brand products: <ul style="list-style-type: none"> • CVS • Rite Aid • Target <p>Currently banned from any Premium body care product:</p> <ul style="list-style-type: none"> • Whole Foods 	Propylparaben is a preservative.	2,694
Toluene	Toluene is toxic to the brain and the nervous system; it also harms the developing fetus.	Restricted: <ul style="list-style-type: none"> • EU • ASEAN 	Scheduled ban for store brand products: <ul style="list-style-type: none"> • CVS • Rite Aid • Walgreens <p>Currently banned from any body care product:</p> <ul style="list-style-type: none"> • Whole Foods 	Toluene is a solvent used in nail polish, nail treatments and hair dye.	8
Triclosan	Triclosan affects the thyroid and reproductive hormones .	Restricted: <ul style="list-style-type: none"> • EU • ASEAN • Canada • Japan • Australia 	Scheduled ban for store brand products: <ul style="list-style-type: none"> • CVS • Rite Aid • Walgreens 	Triclosan is an antimicrobial compound used in deodorants, mouthwash, hand sanitizer, shaving cream and toothpaste.	46



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		Banned in over-the-counter antiseptic wash products, like liquid soap: <ul style="list-style-type: none"> • U.S. FDA 	Currently banned from any body care product: <ul style="list-style-type: none"> • Whole Foods 		
Carbon black	Carbon black has been classified by the International Agency for Research on Cancer as possibly carcinogenic to humans.	Restricted: <ul style="list-style-type: none"> • EU • ASEAN Set limits on impurities: <ul style="list-style-type: none"> • U.S. FDA 	No retail restrictions.	Carbon black is a pigment used in eyeliner, mascara, and lipstick.	73
PFAS (per- and polyfluoroalkyl substances)	PFAS chemicals harm the developing fetus, increase the risk of cancer, affect the immune system and disrupt hormones.	The EU has scheduled the restriction of the manufacture and sale of one PFAS, perfluorooctanoic acid (PFOA), under the REACH law, by 2020	No retail restrictions.	PFAS is a class of more than 4,000 chemicals. They have been found in sunscreen, foundation, concealer, eyeliner, shaving cream and hairspray.	A 2018 analysis by EWG found nearly 200 products containing one of 13 PFAS chemicals.
Asbestos	Asbestos is a carcinogen and can cause lung diseases if inhaled .	A type of asbestos (blue asbestos, or crocidolite) is banned in personal care products: <ul style="list-style-type: none"> • EU • ASEAN 	No retail restrictions.	Asbestos is a fibrous mineral. It can be found near talc deposits and may contaminate talcum powder and talc products. Talc can be used to absorb moisture, make a product opaque or make a product feel smoother.	Asbestos is a contaminant that is not intentionally put into personal care products. 2,119 products use talc.
Lead and related compounds	Lead can affect the brain development of children and cause permanent nervous system damage. Lead also harms other organ systems ,	Banned: <ul style="list-style-type: none"> • EU • ASEAN • Canada 	No retail restrictions.	Lead is a heavy metal that occurs as a contaminant in lipstick, eye shadow, blush, powders, shampoos and lotions.	Lead is a contaminant that is not intentionally put into personal care products.



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	especially the cardiovascular system and the heart.	Recommended max. level of contamination in lip products and externally applied cosmetics (10 ppm): <ul style="list-style-type: none">• U.S. FDA			
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* These chemicals are on Rite Aid's Expanded Restricted Substances List. The company screens products against this list and encourages suppliers to eliminate these chemicals.