David Susuki Foundation

'Dirty Dozen' cosmetic chemicals to avoid

Some of the ingredients in beauty products aren't that pretty. U.S. researchers report that one in eight of the 82,000 ingredients used in personal care products are industrial chemicals, including carcinogens, pesticides, reproductive toxins, and hormone disruptors. Many products include plasticizers (chemicals that keep concrete soft), degreasers (used to get grime off auto parts), and surfactants (they reduce surface tension in water, like in paint and inks). Imagine what that does to your skin, and to the environment.

We surveyed Canadians to see how many of the Dirty Dozen ingredients below appeared in their cosmetics, and our findings show that 80 per cent of entered products contained at least one of these toxic chemicals.

For more detailed information on the Dirty Dozen, please see below or check out our Dirty Dozen backgrounder

You can avoid harmful chemicals when you use our shopper's guide, and audit your bathroom cupboard using this list of harmful ingredients:

1. BHA and BHT

Used mainly in moisturizers and makeup as preservatives. Suspected endocrine disruptors and may cause cancer (BHA). Harmful to fish and other wildlife. Read more »

2. Coal tar dyes: p-phenylenediamine and colours listed as "CI" followed by a five digit number

In addition to coal tar dyes, natural and inorganic pigments used in cosmetics are also assigned Colour Index numbers (in the 75000 and 77000 series, respectively).

Look for p-phenylenediamine hair dyes and in other products colours listed as "CI" followed by five digits.1 The U.S. colour name may also be listed (e.g. "FD&C Blue No. 1" or "Blue 1"). Potential to cause cancer and may be contaminated with heavy metals toxic to the brain. Read more »

3. DEA-related ingredients

Used in creamy and foaming products, such as moisturizers and shampoos. Can react to form nitrosamines, which may cause cancer. Harmful to fish and other wildlife. Look also for related chemicals MEA and TEA. Read more »

4. Dibutyl phthalate

Used as a plasticizer in some nail care products. Suspected endocrine disrupter and reproductive toxicant. Harmful to fish and other wildlife. Read more »

5. Formaldehyde-releasing preservatives

Look for DMDM hydantoin, diazolidinyl urea, imidazolidinyl urea, methenamine and quarternium-15. Used in a variety of cosmetics. Slowly release small amounts of formaldehyde, which causes cancer. Read more »

6. Parabens

Used in a variety of cosmetics as preservatives. Suspected endocrine disrupters and may interfere with male reproductive functions. Read more »

7. Parfum (a.k.a. fragrance)

Any mixture of fragrance ingredients used in a variety of cosmetics — even in some products marketed as "unscented." Some fragrance ingredients can trigger allergies and asthma. Some linked to cancer and neurotoxicity. Some harmful to fish and other wildlife. Read more »

8. PEG compounds

Used in many cosmetic cream bases. Can be contaminated with 1,4-dioxane, which may cause cancer. Also for related chemical propylene glycol and other ingredients with the letters "eth" (e.g., polyethylene glycol). Read more »

9. Petrolatum

Used in some hair products for shine and as a moisture barrier in some lip balms, lip sticks and moisturizers. A petroleum product that can be contaminated with polycyclic aromatic hydrocarbons, which may cause cancer. Read more »

10. Siloxanes

Look for ingredients ending in "-siloxane" or "-methicone." Used in a variety of cosmetics to soften, smooth and moisten. Suspected endocrine disrupter and reproductive toxicant (cyclotetrasiloxane). Harmful to fish and other wildlife. Read more »

11. Sodium laureth sulfate

Used in foaming cosmetics, such as shampoos, cleansers and bubble bath. Can be contaminated with 1,4-dioxane, which may cause cancer. Look also for related chemical sodium lauryl sulfate and other ingredients with the letters "eth" (e.g., sodium laureth sulfate). Read more »

12. Triclosan

Used in antibacterial cosmetics, such as toothpastes, cleansers and antiperspirants. Suspected endocrine disrupter and may contribute to antibiotic resistance in bacteria. Harmful to fish and other wildlife. Read more »

Download the backgrounder for more information.