

## The Household Toxic Tour: Bathroom

Many cosmetics and personal hygiene products contain toxic chemicals. A study by an American government agency found that 884 of the chemicals used in personal care products and cosmetics are toxic. Many chemicals used in personal care products can irritate the skin and eyes, while some of these chemicals have been linked to cancers, Alzheimer's disease and birth defects. Here is a look at some of our common cosmetic products and what toxic ingredients they may be hiding.



### Cosmetics

A class of chemicals called phthalates are found in many cosmetic products, including perfumes, hair sprays, deodorants and styling lotions. Some phthalates, may cause cancer and some have been linked to damage of the sex and reproductive organs and to birth defects. High levels of phthalates have been found in the following perfumes: *Red Door*, *White*

*Diamonds*, *Escape*, *Eternity*, *Fire & Ice*, and *Poison*. Varying levels were found in other cosmetics brands such as *Revlon* and *Calvin Klein*.

Petroleum distillates, which are found in lipsticks, can cause damage to the nervous system, skin, kidneys, and eyes.

**Nail varnish** and nail hardeners often contain toluene and formaldehyde. Both these chemicals are toxic if they swallowed or breathed in (think of the strong smell of nail varnish – these are chemicals you are breathing in!). Children can inhale formaldehyde if nail polishes or hardeners are being used nearby. These products emit high levels of formaldehyde when wet. Formaldehyde may cause cancer of the nose and throat and respiratory problems. Toluene, which is also found in some nail varnishes, can cause memory loss, skin rashes, kidney and liver damage, damage to the developing foetus, spontaneous abortions and miscarriages.

**Dove Beauty Bar** contains formaldehyde (see above). It also contains Butylated Hydroxytoluene (BHT), which is also suspected to be cancer causing.

**Shampoos** may contain formaldehyde (possibly cancer-causing), and most contain sodium lauryl sulphate (SLS). SLS may damage protein formation in the eyes, not only from direct eye contact but also through skin absorption. SLS may lead to cataract formation and eventually to blindness.

Many dandruff shampoos contain chemicals that, if swallowed, can damage vital organs. Dandruff shampoos may also contain resorcinol, which is easily absorbed through the skin/scalp and can lead to inflammation of the inner eyelids, skin irritation, dizziness, rapid heartbeats, breathing difficulties, unconsciousness and convulsions. Dandruff shampoos may also contain coal tar.

The pesticide, Lindane, is used in shampoos for treating lice and scabies. Lindane has been banned in several countries as it has been linked to brain cancer.



**Mouthwash and Toothpaste** may contain formaldehyde (a probable carcinogen) and ammonia. Exposure to ammonia fumes over a long period of time may cause damage to the eyes, liver, kidneys, and lungs, and may cause bronchitis to develop,

with cough, phlegm and shortness of breath. Studies in recent years have shown that fluoride does NOT reduce cavities and now scientists are linking fluoride to dental deformity and crippling bone disease. Fluoride is a hormone disrupter. A recent report by the Greater Boston Physicians for Social Responsibility reviews studies showing that fluoride interferes with brain function in young animals and in children, reducing IQ. Some evidence suggests that fluoride causes bone cancer in male rats and perhaps in young men. Some European countries have recently banned most forms of fluoride products and are investigating bans on fluoride toothpaste.

The pharmaceutical company, *Sepracor*, disclosed that concentrations of fluorides from fluoridated toothpastes and mouthwashes activate G proteins in the oral cavity, thereby promoting gingivitis and periodontitis, as well as oral cancer.

**Bubble baths (bath foam)** almost always contain Sodium Lauryl Sulphate (see above) and formaldehyde (possibly cancer-causing) and many chemical perfumes.

Some permanent colour **hair dyes** contain cancer-causing chemicals. Women who use dark, especially black, hair dyes for prolonged periods might have increased risk of non-Hodgkin's lymphoma and multiple myeloma (malignant tumours formed by bone marrow cells).



**Hair sprays** make use of propellants (such as butane, propane or isobutene) which are known to affect the brain, central nervous system and cause skin irritation. Formaldehyde, which is possibly cancer causing when inhaled, is also found in some hair sprays. Phthalates, which damage the human reproductive system, liver, kidneys and harms the developing foetus, are found in *Aqua Net*

*Professional Hair Spray* and *VO5 Crystal Clear 14 Hour Hold*.

Most **antiperspirants and deodorants** contain aluminium. The New England Journal of medicine has found a connection between aluminium and brain disorders (such as dementia, behavioural problems, poor memory and Alzheimer's) as well as to osteoporosis. These products also contain zinc, zinc salts, antiseptics, triclosan, perfumes, propellants and formaldehyde. Some of these chemicals are thought to cause cancer, while others may cause severe skin irritations, as well as blocked and infected glands and liver and kidney damage.

Octyomethoxycinnamate (OMC) is a chemical ingredient in 90% of the world's **sunscreen** lotions. This chemical may actually kills living cells. *Nivea Sun* and *Garnier's Amber Soleil* are two sunscreens available in South Africa which do not contain OMC.

Beware of **aftershaves** which contain benzyl acetate - which is linked to pancreatic cancer and may be absorbed through the skin - ethyl acetate - which may cause damage to the liver and kidneys, headaches, and have a dehydrating effect on the skin, causing drying and cracking and terpineol, which, if breathed into the lungs, may produce pneumonitis or even fatal edema. It can also cause CNS and respiratory depression, and headaches.

### **Shaving foams/creams**

Beware of the following ingredients commonly found in shaving creams:

**Benzaldehyde**, which is a central nervous system suppressant, may cause skin, eye and lung irritation, nausea, abdominal pain and kidney damage. **Camphor**, which, if breathed in or rubbed into the skin, may cause irritation of the eyes, nose and throat, nausea, and even convulsions. **Ethanol**, which if inhaled or ingested can cause irritation to the upper respiratory tract, even in low concentrations, as well as central nervous system disorder. **Limonene**, which is carcinogenic and must not be inhaled. **Linalool** which has been linked to respiratory disturbances. Animal studies have linked it to reduced spontaneous motor activity and depressed heart activity. **g-Terpinene**, which can provoke asthmatic attacks.

### **Safe Substitutes for Personal Hygiene and Cosmetic Products**

We use cosmetics and hygiene products for a fairly narrow range of reasons: to keep skin moist and supple; to clean hair without stripping it of natural oils; to eliminate unpleasant body or mouth odours; to prevent skin oiliness and clogged skin pores; and simply for the pleasure of relaxing and pampering ourselves with body-care or facial-care treatments. The following ingredients can help achieve these purposes without the use of toxic additives, synthetic fragrances, or artificial colourings:

**Moisturizers and conditioners:** egg yolk, milk, yoghurt, safflower oil (for light moisturizing), olive oil (for dry skin or hair), water, oatmeal, jojoba oil. **Deodorants:** bicarb, white clay, and deodorant crystal (e.g. potassium sulphate). **Toothpastes:** baking soda, salt, herbal toothpastes available from health shops. **Soaps cleansing agents:** castile soap, olive oil based soap. **Perfumes:** essential oils provide non-toxic fragrances that can be used to scent shampoo, bath soaks, or even, in the case of peppermint, to flavour toothpaste.

Although it's easy to make healthful alternatives to many cosmetic and hygiene products, any natural-foods store has a fairly wide selection of shampoos, moisturizers, toothpastes, after shaves, soaps, and bath products that do not contain the harmful ingredients in many commercial preparations.