



## Hazardous Ingredients in Cosmetics and Personal Care

A study, conducted by researchers at the U.S. Food and Drug Administration (FDA), found that sunscreen chemicals leach into people's blood rather quickly and reach high levels.

### Chemicals of Concern

There are many chemical presents in cosmetic and personal care products, some of these are:

- **Phthalates:** Phthalates are used as plasticisers and solvents, and can be found in fragrances, hair products, skin lotions, nail polish and nail hardeners. They have **endocrine disruption effects**, and have been linked with endometriosis and early puberty in girls, reproductive organ abnormalities and reduced fertility in males. They can also act on the thyroid, and have been linked with obesity.
- **Parabens:** Parabens are preservatives used in many cosmetics, with methyl paraben being the most commonly used. Parabens have been found to have **endocrine disruption effects** in lab tests, although the relevance to humans isn't well understood.
- **Nanoparticles:** Titanium dioxide or zinc oxide found in some mineral make-up and sunscreen products may contain particles in the nano range, which have been linked with **cellular damage - including damage to DNA**.
- **Formaldehyde and formaldehyde donors:** Formaldehyde is a preservative that can **irritate skin, eyes, nose and the respiratory tract**, and can cause **cancer** among those with high levels of exposure. Small amounts are permitted for use in cosmetics, and it's mainly found in hair straighteners and nail polish/hardeners
- **Coal tar:** Coal tar is a known **carcinogen** used in psoriasis and dandruff treatments, and some colouring dyes are also derived from coal tar.
- **UV filters:** Recently Denmark banned these due to its effects in children and pregnant women
- **Triclosan:** Triclosan is a preservative and antibacterial agent found in personal care products such as antiperspirant, soap, hand wash and toothpaste. Tests on mammals and other animals have shown **endocrine disruptor effects**. There are also concerns that it may contribute to antibiotic resistance.
- Apart from it, heavy metals - **Lead and Arsenic, lead, mercury, Chromium** are used in cosmetic and health care product.

### Who Regulates Cosmetics in India?

- The cosmetic products in India are regulated under the **Drugs and Cosmetics Act 1940 and Rules 1945** and **Labelling Declarations by the Bureau of Indian Standards (BIS)**. BIS sets the standards for cosmetics for the products listed under Schedule 'S' of the Drugs and Cosmetics Rules 1945.
- All cosmetic products that are **imported** for sale in India, needs to be registered with the **Central Drugs Standard Control Organisation (CDSCO)** which has been appointed as the licensing authority for the purpose of these rules.

