Cosmetic chemical concerns

Some families of chemicals in personal care products cause concerns. Here we examine some of these ingredients’ roles and why in some cases manufacturers are looking for alternatives.

**Formaldehyde releasers**

Formaldehyde releasers slowly generate the preservative formaldehyde. Though the levels of formaldehyde these compounds release are low, they can still cause an allergic response in sensitized people.

**Phthalates**

Some phthalate esters may interfere with hormones and may have reproductive toxicity. Diethyl phthalate (DEP), used in some cosmetics, has less toxicity than longer-chain phthalate esters and is safe at the concentrations used.

**Silicones**

Silicones in cosmetics include dimethicone and decamethyldicyclopasiloxane (D₅). The EU has limited the use of some cyclic silicones, including D₅, in cosmetic products because of concerns about their accumulation in the environment.

**Cosmetic ingredient roles**

- **Dyes or pigments**
  - Color cosmetics
- **Emollients**
  - Prevent water loss from the skin
- **Emulsifiers**
  - Stop ingredients from separating
- **Fragrances**
  - Improve the smell of cosmetic products
- **pH stabilizers**
  - Adjust the acidity of cosmetics
- **Preservatives**
  - Prevent the growth of microorganisms
- **Solvents**
  - Dissolve other ingredients
- **Thickeners**
  - Increase the viscosity of cosmetics

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