

Some of the potentially harmful ingredients commonly used by the personal care industry.

Alcohol

A colourless, volatile, flammable, liquid produced by the fermentation of yeast and carbohydrates. Alcohol is used frequently as a solvent and is also found in beverages and medicine. As an ingredient in ingestible products, alcohol may cause body tissues to be more vulnerable to carcinogens. Mouth washes with an alcohol of 25% or more have been implicated in mouth, tongue and throat cancers.

Alpha Hydroxy Acid

An organic acid produced by anaerobic respiration. Skin care products containing AHA exfoliate not only damage skin cells, but the skin's protective barrier as well. Long-term skin damage may result from its use.

Aluminum

A metallic element used extensively in the manufacture of aircraft components, prosthetic devices and as an ingredient in antiperspirants, antacids and antiseptics. Aluminum has been linked to Alzheimer's disease.

Animal Fat (Tallow)

A type of animal tissue made up of oily solids or semisolids that are water-insoluble esters of glycerol with fatty acids. Animal fats and lye are the chief ingredients of a bar of soap, a cleaning and emulsifying product that may act as a breeding ground for bacteria.

Bentonite

A porous clay that expands to many times its dry volume as it absorbs water. Bentonite, commonly found in many cosmetic foundations, may clog pores and suffocate the skin.

Collagen

An insoluble fibrous protein that is too large to penetrate the skin. The collagen found in most skin care products is derived from animal skins and ground chicken feet. This ingredient forms a layer of film that may suffocate the skin.

Dioxins

A potentially carcinogenic by-product that results from the process used to bleach paper at paper mills. Dioxins treated

containers sometimes transfer dioxins to the product itself.

Elastin of High-Molecular Weight

A protein similar to collagen that is the main component of elastic fibres. Elastin is also derived from animal sources. Its effect on the skin is similar to collagen.

Fluorocarbons

A colourless, non-flammable gas or liquid that can produce mild upper respiratory tract irritation. Fluorocarbons are commonly used as a propellant in hairsprays.

Formaldehyde

A toxic, colourless gas that is an irritant and a carcinogen. When combined with water, formaldehyde is used as a disinfectant, fixative or preservative. Formaldehyde is found in many cosmetic products and conventional nail care systems.

Glycerin

A syrupy liquid that is chemically produced by combining water and fat. Glycerin is used as a solvent and plasticiser. Unless the humidity of air is over 65%, glycerin draws moisture from the lower layers of the surface, which dries the skin from the inside out.

Kaolin

A fine white clay used in making porcelain. Like bentonite, kaolin smothers and weakens the skin.

Lanolin

A fatty substance extracted from wool, which is frequently found in cosmetics and lotions. Lanolin is a common skin sensitiser that can cause allergic reactions, such as skin rashes.

Lye

A highly concentrated watery solution of sodium hydroxide or potassium hydroxide. Lye is combined with animal fats to make bars of soap, which may corrode and dry out the skin.

Mineral Oil

A derivative of crude oil (petroleum) that is used industrially as a cutting fluid and lubricating oil. Mineral oil forms an oily film over the skin to lock in the moisture,

toxins and wastes, but hinders normal skin respiration by keeping oxygen out. A petroleum based grease that is used industrially as a grease component. Petrolatum exhibits many of the same potentially harmful properties as mineral oil.

Propylene Glycol

A cosmetic form of mineral oil found in automatic brake and hydraulic fluid and industrial antifreeze. In skin and hair products, propylene glycol works as a humectant, which is a substance that retains the moisture content of skin or cosmetic products by preventing the escape of moisture or water. Material Safety Sheets (MSDS) warn users to avoid skin contact with propylene glycol as this strong skin irritant can cause liver damage.

Sodium Lauryl Sulphate (SLS)

An anionic surfactant used in cosmetics and industrial chemicals as a cleansing agent. Used as a thickener and foaming agent in shampoos, toothpastes and cleansers, and as a wetting agent in garage floor cleaners, engine degreasers and auto cleaning products. SLS is used around the world in clinical studies as a skin irritant. High levels of skin penetration may occur at even low concentrations. Studies have shown SLS to have a degenerative effect on the cell membrane due to its protein denaturing properties. It can also maintain residual levels in major organs of the body from skin contact with SLS or by its combination with other nitrogen bearing ingredients within a formulation, creating a nitro-sating agent.

Sodium Laureth Sulphate (SLES)

SLES is the alcohol form (ethoxylated) of SLS. It has higher foaming qualities and is slightly less irritating, but may cause more drying. May also cause potentially carcinogenic formulations of nitrates, or nitro-sating agents, by reacting with other ingredients.

Talc

A soft Grey-green mineral used in some personal hygiene and cosmetic products. Inhaling talc may be harmful as this substance is recognised as a potential carcinogen.

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