

Chemical Additives



Have you read the ingredients on your deodorant, perfume, facemask or other skincare product? These lists often contain acronyms or other unpronounceable names – do you know what they are, or even what they do? Let Helen enlighten you...

Mineral Oil – Petroleum Derivatives

Used in many products (baby oil is 100% mineral oil!), this ingredient actually coats the skin just like plastic wrap, disrupting its natural immune barrier and inhibiting normal functions. As the body's largest organ of elimination, it is vital that the skin is free to release toxins. But mineral oil can impede this process, allowing toxins to accumulate. It also slows down skin function and normal cell development, resulting in premature ageing, and exacerbates dry skin conditions like eczema.

Polyethylene Glycol – PEG

This is used in cleansers to dissolve oil and grease as well as to thicken products. A number after 'PEG' refers to its molecular weight, which influences its characteristics. Because of their effectiveness, PEGs are often used in caustic spray-on oven cleaners, yet they are also found in many personal care products. Not only are they potentially carcinogenic, they also contribute to stripping the skin's Natural Moisture Factor, leaving the immune system vulnerable.

Propylene Glycol – PG

Used as a 'surfactant' or wetting agent and solvent, PG is actually the active component in antifreeze. It is often used to transport other active ingredients into the skin. Because of PG's ability to penetrate the skin quickly, workers have to wear protective clothing when working with this toxic substance. PG's Material Safety Data Sheets warn against skin contact because PG has systemic consequences which affect the brain, liver and kidneys causing abnormalities. Despite this, there isn't even a warning label on products such as stick deodorants, where the concentration of this chemical is greater than that of most industrial applications.

Sodium Lauryl Sulfate (SLS) & Sodium Laureth Sulfate (SLES)

Derived from palm oil or coconut oil, SLS/SLES are detergents, wetting agents and emulsifiers, used in about 98% of all personal care products. They are considered safe to be used in rinse-off products only when levels do not exceed 1%, due to the ease with which they are absorbed into eye and skin tissue. Externally they strip the skin of oils and can cause irritation. Whereas SLES is considered less irritating than SLS, it may be more drying in effect and although alone it is not considered carcinogenic, it can combine with other products' ingredients to form potentially carcinogenic nitrates and dioxins which are easily absorbed by the skin.

One look at the ingredients list will clearly show that the 1% 'safe level' is exceeded in many cases, with SLS appearing in the top third of the ingredients lists, which normally accounts for the top 70% of the product content.

Parabens – Alph hydroxy benzoate

Common parabens include Methylparaben (E218), Ethylparaben (E214), Propylparaben (E216) and Butylparaben.

It is estimated that around 99% of all skincare products contain one or more of the paraben preservatives because of their broad spectrum of effectiveness. These preservatives have been shown in studies to mimic oestrogen, with butylparaben being the most potent offender. The concern is that with long-term contact through various skincare products these additives may affect fertility and the development of the foetus and therefore research should be carried out to discover the long-term safety of such chemicals, particularly when used by pregnant women.

Lanolin

This is a fatty substance extracted from wool, and is frequently found in cosmetics and lotions used to soften and soothe the skin. Lanolin is a common trigger that can cause allergic reactions in some people. This is mainly due to the toxic effects of chemical residues contained within it, residues left over from livestock being sprayed with powerful organophosphate insecticides whilst on the farm.

Organophosphates are a very common contaminant in sheep wool because of the practice of regularly dipping sheep to control lice and blow fly. Avoid any product containing lanolin if you have sensitive skin!

Talc

This is a soft, grey-green mineral used in some personal hygiene and cosmetic products. Inhaling talc dust is extremely dangerous as it belongs to the same family as asbestos and is a recognised carcinogen. Talc is widely accepted by medical experts as being one of the primary causes of ovarian cancer if used on the genital area.

Searching for alternatives

There are some fantastic alternatives available and with awareness increasing there are more and more natural and organic products appearing on the market every day. This is a positive trend and one to be supported, as it helps to ensure that the cosmetics industry will continue to search for safer chemicals to use in their products thanks to consumer demand.

Where to look online

www.ewg.org

The Environmental Working Group

Founded in 1993 in the USA. This is a useful reference site relating to all aspects of our environment and health. Their teams of scientists, engineers, policy experts, lawyers and computer programmers all pore over US Government data, legal documents and scientific studies, and conduct their own laboratory tests in order to expose threats to your health and the environment, and to find solutions.

www.cosmeticsdatabase.com

The Environmental Working Group Skin Deep Database

Looks at the ingredients used in commonly available high street brands and advises on the toxicity of those ingredients.

www.hazard.com/msds

A valuable online resource for detailed information relating to any synthetic chemical that may be found in your skincare and household products.

www.alotoforganics.co.uk

A valuable online search engine, bringing together links to many suppliers of natural, organic and fair trade products including foods, clothing, cosmetics and more.