



Why NANI Hair Care refuses to use **Sulfates** and **Parabens** in our products.

Sulfates

Both **Sodium Laureth Sulfate** (SLES) and its close relative **Sodium Lauryl Sulfate** (SLS) are **commonly used in many soaps, shampoos, detergents, toothpastes and other products** that we expect to "foam up". Both chemicals are very effective foaming agents, chemically known as surfactants. Unfortunately, both sodium laureth sulfate and its cousin are also very dangerous, highly irritating chemicals. Far from giving "healthy shining hair" and "beautiful skin", soaps and shampoos containing sodium laureth sulfate can lead to **direct damage to the hair follicle**, skin damage, permanent eye damage in children and even liver toxicity. Although sodium laureth sulfate is somewhat less irritating than SLS, **the liver cannot metabolize it** and its effects are therefore much longer lasting. This not only means it stays in the body tissues for longer, but much more precious energy is used getting rid of it. A report published in the Journal of The American College of Toxicology in 1983 showed that concentrations of SLS as low as 0.5% could cause irritation and concentrations of 10-30% caused **skin corrosion and severe irritation**. The National Institutes of Health "Household Products Directory" of chemical ingredients lists over 80 products that contain SLS and SLES. Some soap has concentrations of up to 30%, which the ACT report called "**highly irritating and dangerous**". Shampoos are among the most frequently reported products to the FDA. Reports include eye irritation, scalp irritation, tangled hair, swelling of the hands, face and arms and split and fuzzy hair. This is highly characteristic of sodium laureth sulfate and almost definitely directly related to its use.

So why is a dangerous chemical like sodium laureth sulfate used in our soaps and shampoos?

The answer is simple – **it's cheap**. The sodium laureth sulfate found in soap is exactly the same as you would find in a car wash or a garage, where it is used to degrease car engines. In the same way as it dissolves the grease on car engines, SLES also dissolves the oils on your skin, which can cause a **drying effect**. It is also well documented that it **denatures skin proteins**, which causes not only **irritation**, but also allows environmental **contaminants** easier access to the lower, sensitive layers of the skin. This denaturing of skin proteins may even be implicated in skin and other cancers. Perhaps most worryingly, sodium laureth sulfate is also **absorbed into the body** from skin application. Once it has been absorbed, one of the main effects of SLS is to mimic the activity of the hormone Oestrogen. This has many health implications and may be responsible for a variety of health problems from **PMS** and **Menopausal symptoms** to **dropping male fertility** and increasing **breast cancer**, where oestrogen levels are known to be involved.

Parabens

Methyl, Butyl and Propyl Parabens can be found in **shampoos**, commercial moisturizers, shaving gels, cleansing gels, topical drugs and toothpaste. They are also used as food additives in some products. Basically, a huge percentage of the products you buy for everyday use contain some form of paraben, so it can be difficult to find products that do not use them. **Parabens can mimic the hormone estrogen**, which is known to play a role in the development of **breast cancers**. In 2004, Dr Philippa Darbre at the University of Reading U.K. published a study in the Journal of Applied Toxicology that said her group analyzed 20 breast tumors and found **high concentrations of parabens** in 18 samples!

Parabens also have been found to **disrupt your body's endocrine system** (i.e., hypothalamus, ovaries and thyroid). These chemical preservatives typically enter the body by being absorbed through the skin where they bind to the body's estrogen receptors and encourage the growth of cancer cells. Anything that enters the body through the skin may be as high as **10 times the concentration of an oral dose**. In the July 2002 issue of the Archives of Toxicology, Dr. S. Oishi of the Department of Toxicology, Tokyo Metropolitan Research Laboratory of Public Health reported that exposure of newborn male mammals to butyl paraben "**adversely affects the secretion of testosterone** and the function of the male reproductive system." There are a lot of other reports available all over the Internet on the harmful effects of parabens.