

naturalmente

breathe

SKIN | BODY | MAKE-UP THERAPY



Organic Cosmetics  
VS.  
Petroleum

**Liquid petroleum, or mineral oil, is a key component of many ingredients in conventional cosmetics. Even though petroleum is found in nature, it is not allowed in natural personal care products.**

### **WHY?**

**Mineral oil is not derived from a living source. The material has been dead for tens of thousands of years. It cannot nourish the skin like extracts from a freshly harvested plant. Mineral oil also has a composition totally different from our skin's natural composition. It leaves our skin greasy and suffocated.**

In recent decades, the cosmetics industry has grown... Hundreds of new components have been made available to those who make cosmetics. Why do companies have abandoned the use of components of plants to start using chemical ingredients for the production of cosmetics? **A chemical element is inert. It is more stable and more easily workable. The ingredients offered by chemistry are low cost, they are often the waste substances obtained during the processes of transformation of other products (for example, oil).**

How is it therefore possible to understand the quality of a cosmetic? The only possible way is **to read the ingredients** with which it was formulated and see if there are unwanted substances. **Warning! The price is often a bad indicator.** There are creams sold in perfumeries at crazy prices that contain more plastic than anything else!

By law, all companies that produce cosmetics, must indicate all the ingredients used in the form of a list. This list is called **INCI (International Nomenclature of Cosmetic Ingredients)** and represents all of the ingredients that make up a cosmetic. **The ingredients required to be listed in descending order of quantity. At the top we find then the ingredients with the greatest amount, while at the end of the list those present in smaller amounts.**



It is easy to find such as **Paraffin (Paraffinum Liquidum or Petrolatum)**. It is a substance obtained from the processing of waste oil. It is often used as an emollient as it leaves the skin soft and smooth. It is practically liquid plastic! The skin appears to be smooth to the touch and soft, but it is only an apparent effect. A famous oil "cleanser and moisturizer" also referred to as a product for children has the Paraffin among its basic ingredients.

The **Silicon**, in all its forms, is an element resulting from the chemical synthesis of the Silica. Historically it began its presence in the world of cosmetics from the '60s as **an additive to make the sun creams waterproof**. Thus began, thanks to the lower cost of the product, the important escalation of its use by cosmetic companies. Over the years they have increased the different types of Silicones used so that manufacturers in the world increased from 5 to 23 and in INCI nomenclature are as many as 125 different items that lead to the ingredient Silicone.

Do you really know the ingredients of a traditional cosmetic? Most of the creams on the market contain **Petrolatum** or similar ingredients such as **Vaseline, Mineral Oil, Paraffinum Liquidum which are obtained from oil refining**. Well, for years it has been argued that the **Petrolatum** was the best moisturizer. Unfortunately such ingredients continue to be supported by many dermatologists and cosmetologists...

**Petrolatums** are a class of compounds derived from petroleum by distillation. The best-known product among **Petrolatums** is undoubtedly the **Vaseline** and often it is used this term loosely, to indicate any compound of the class of **Petrolatums**. These substances are very "heavy": large molecules of saturated hydrocarbons consist of at least 20 carbon atoms. They appear as a **"white" waxy translucent paste** in the most pure mixtures (used in cosmetics and pharmaceuticals) or **"amber"** for less valuable ones (polluted by refinery residues and then used in the industry as lubricants). **Such substances are therefore completely irrelevant to living organisms, to our body, our skin ... and of course they are not biodegradable.**

Trade names of a.m. substances which you can find on the products labels

**Mineral Oil / Petroleum Jelly / Petrolatum / Vaseline / Paraffinum Liquidum**



In the cosmetic industry (or even for the ointments for pharmaceutical use) they are used as **film-forming agents**, since they give a feeling of smoothness: they create a "film" on the skin which gives the sensation of "smooth". But **this "film" is a thin synthetic film that we put on our skin comparable to PVA glue, or transparent film used to store food**. The effect is therefore to prevent dehydration of the skin: the "film" on the skin prevents the evaporation of water contained in it. This determines an occlusive effect (and insulation) for the pores of the skin that can not in any way transpire and breathe with the environment. **So this is a fake hydration: it simply prevents dehydration!**

This may involve, for example bacterial infections especially in sensitive skin like those of children. Under the layer of "liquid plastic" bacteria find an ideal environment (hot and humid) to proliferate. **Proper skin perspiration is then compromised as well as its microbiological delicate balance**. Perspiration is physiological and useful, in normal amounts. Too much, of course, can dry the skin, but an oil or a vegetable oil is already enough to reduce it without blocking it completely. Hydrating the skin with a cream made of preponderant **Petrolatum** you risk an excessive wetting (too much water stagnates in the skin) and maceration of the surface layer, which must contain, if healthy, not more than 10% of water.

## PARABENS

**Parabens** are a class of chemical compounds used as preservatives in cosmetic products (also for children), and pharmaceuticals. From the chemical point of view they are esters of **Paraidrossibenzoico**. These products are totally synthetic.

These compounds and their salts are used primarily for their bactericidal and fungicidal properties. **Their commercial success is due to their effectiveness as preservatives and to their low cost**. But they hurt and if it was worth the precautionary principle (to ban the substances that have been shown not to be completely safe), they would have already been banned for years.

If you go to a supermarket, perfumery, pharmacy or herbal shop, you will notice that the majority of cosmetics and hygiene products contain **Parabens**. The creepy thing is that



they are also found in many products pretended to be “natural” or “green”. Parabens are in face creams, make-up removers, cleansers, deodorants, toothpaste and shampoos, in sun and after-sun creams.

Parabens are legally authorized in the European Union and the cosmetics industry swears on their safety. Unfortunately, from the “alerts” of researchers to restrictive measures often pass decades.

The economic and political interests are always huge. Recent history is full of chemicals (drugs, pesticides, insecticides, food additives, etc.) which were marketed as harmless, and then after years, banned because they are considered to be toxic or carcinogenic.

The common Parabens found in commercial products are:

- Methyl Paraben (E218, its sodium salt E219)
- Ethyl Paraben (E214, its sodium salt E215)
- Propyl Paraben (E216, its sodium salt E217)
- Butyl Paraben, Isobutyl Paraben, Isopropyl Paraben, Benzyl Paraben and their salts

Scientific studies have shown the following side effects of Parabens: it is proved that they can cause irritation, dermatitis and rosacea (chronic erythema of the face). It has been proved that they have a hormonal action (estrogen). Parabens are part of a large group of chemicals called “Xenoestrogens” or “Endocrine Hormone”. These substances foreign to the body, are able to mimic estrogen, which are powerful stimulants of growth and transformation of mammalian cells into malignant cells.

Like other Xenoestrogens, Parabens once in human tissues, they can remain for decades, unscathed, and cause disease at a distance of 20-30 years. Some researchers believe that the huge presence of Xenoestrogens in the environment and the food chain is one of the causes of breast cancer (increased in recent decades), ovarian cysts, endometriosis, infertility of couples (1 out of 5 has fertility problems and in 50% of cases the problem comes from males), and testicular cancer (increased by 3% in recent years). The pesticides in food are also the “hormone disruptors”.



Proven the relationship between **Parabens** and the onset of breast cancer: Significant concentrations of **Parabens** were found in breast tumors. In 2004, the oncologist Dr Philipa Darbre, University of Reading (UK), has found **Parabens** in all the samples of breast cancer tissues analyzed.

Due to the lack of funds, the study of Dr Darbre, referred to 20 samples only, does not show (unfortunately and at least for now) that **Parabens** are the cause of tumors, but clearly indicates that these substances tend to accumulate in the tissues in which cancer develops.

It is amazing that the cosmetics industry supports research against breast cancer (often underlining it in advertising campaigns!) and at the same time makes money selling products that contain substances that probably cause cancer.

If present in sprays and/or suntan lotions, **Parabens may react with UVB rays causing genetic damage and degenerative processes of the skin.** [Reference: Osamu Handa, Satoko Adachi, Tomohisa Takagi et al. (3 October 2006). "Methylparaben potentiates UV-induced damage of skin keratinocytes." *Toxicology* 227 (1-2): 62-72. doi: 10.1016/j.tox.2006.07.018. PMID16938376].



## USEFUL GUIDE TO APPROACH THE ORGANIC / ECO-BIO COSMETICS

Initially, when buying a cosmetic products it may be difficult to read the INCI nomenclature and understand if the product in your hands is good or bad...

These little tips can be a useful guide for those who had just approached Organic/Eco-Bio cosmetics. Here is a small list of the substances

### WE DO NOT LIKE

- PETROLATUM
- PARAFFINUM LIQUIDUM
- Almost all ingredients description to finish in: -ON(E), -THICONE or -SILOXANE are Silicons
- All numbers (in 80% of the cases are «Red Dot» substances): PEG- (eg. PEG-10), PPG- (eg. PPG-15)
- DEA-, MEA-, TEA-, MIPA-
- EDTA (eg. TETRASODIUM EDTA)
- CARBOMER together with root words as CROSSPOLYMER, ACRYLATE(S), STYRENE, COPOLYMER, NYLON
- TRIETHANOLAMINE
- TRICLOSAN, DMDM HYDANTOIN, IMIDAZOLIDINYL UREA, DIAZOLIDINYL UREA, METHYLCHLOROISOTHIAZOLINONE, SODIUM, HYDROXYMETHYLGLYCINATE, METHYLISOTHIAZOLINONE, FORMALDHEYDE
- CHLOREXIDINE
- NONOXYNOL, POLOXAMER
- C- followed by an odd number or ISO- followed by numbers are Synthetic
- GLYCOL, -TRIMONIUM, -DIMONIUM would be to criticize as well



## THE LINK BETWEEN “THE BREATH” AND “THE SKIN”

Breathing is not only through the lungs but also hematic, cellular and cutaneous. Lungs and skin come from the same embryonic package, so that the skin can be considered the phylogenetic predecessor of the lungs. In this similarity between lungs and skin corresponds an analogy function: as the skin, the lungs are a kind of elastic barrier that regulates a sequence of exchanges between the Man and the Environment

In addition, if the skin, which can be considered a surface structure without solution of continuity, establishes a boundary between “I” and “World”, the lungs make us re-discuss such boundary.

The lungs, like a "soft skin", are bent outwards and with the inspiration, they get in touch with the surrounding World. They take the air component contained in it to release it with the exhalation. The respiratory phase is therefore comparable to a tactile phase: both aspects are functional to a mode of "meeting" with the World.

