# The Nasty Nine

#### THE NINE MOST HARMFUL INGREDIENTS IN BEAUTY PRODUCTS & HOW TO AVOID THEM



VANESSA MEGAN™ advanced organics

# Preface



My skincare journey started when my best friend, Mel, got cancer. She was trying to go chemical free, and we spent a lot of time talking about the harmful chemicals that exist all around us: in our homes, our workplaces and... in our beauty products.

When Mel died, I made it my mission to educate people about what they put on their skin, and to do everything I can in the fight to make the beauty industry toxin-free.

But I can't do it alone. Here, I have composed a list of nine of the most harmful chemicals often found in skincare and beauty products to help you make a more informed decision when purchasing skincare.

Please share this content however you can. I know that together we can make a difference.

Vanessa









### The Nasty Nine

Our motto is that **you should never put anything on your skin you wouldn't eat**, and we really, truly, actually, fully, totally believe it.

The skin is the largest organ of the body and acts like an external digestive system: everything we put on our skin is absorbed by our body and goes into and through our vital organs. So it follows that you only want to feed it nutrients and harmless chemicals.

The problem is that "going clean" can be really difficult. The market is saturated with chemical-filled products wearing a "made with natural ingredients!" badge that trick us into thinking we've made a healthy choice.

In order to combat this issue, we have compiled a list of nine harmful chemicals commonly used in cosmetic and skincare products and exactly what they have been proven scientifically to do to your body. We call these "The Nasty Nine" and recommend that you avoid using any products that include these substances in their ingredient lists.

Reading an ingredient listing may seem tedious, but once you're armed with the knowledge of what to avoid (which you will be very soon, depending on how quickly you read!), it's a pretty cut-and-dry process.



# WHAT EXACTLY DOES 'CHEMICAL FREE' MEAN ?

There's a big push these days to go "chemical free," which is great and healthy and awesome, but... what does it mean, exactly?

Ingredient listings on skincare, cosmetics, cleaning products and even food can get pretty un-pronouncable pretty fast. And even 100% natural products (like ours) contain some scary-looking ingredients.

It can get confusing, but fear not! We're all about complete transparency here at VM and we want to help educate you on what is going onto and into your body, because **once you know what to look for and what to avoid, it's actually super simple**.

So to start, let's look at what exactly a "chemical" is.



Scientifically speaking, a chemical (or chemical substance) is a form of matter that has specific and constant properties. Any substance consisting of matter is technically a chemical. Natural chemicals include gases (like oxygen and hydrogen), solids (like rocks and soil) and liquids (like water). These chemicals are not intrinsically good or bad; they just **are**.

Increasingly, though, the term "chemical" refers to an artificially created or purified substance that mimics some natural phenomena (such as smell, preservative effect, etc). This is particularly true in the beauty and cleaning industries and in the natural health media. When water and chlorine are both classed as chemicals, but you'd only survive drinking a glass of one of them, you start to see the difficulty in using a single word to describe everything.

So, when we say "chemical-free" in terms of our health, we obviously don't mean all chemicals- water and plant fibres are the good guys! A better way to talk about avoiding substances that aren't good for us is to say we are "harmful chemical free."

The question now is, if these substances are harmful, why are they ending up in our skincare?



Chemical substances often replace natural ingredients in our household products because they are cheaper, they act as preservatives (which is convenient because we want our products to last), they mimic smells that we like, they inhibit bodily functions we don't like (sweating, for example) or because they make things foam. Generally these synthetic substances are less expensive and easier for manufacturers to get in bulk.

For a while in the 1940s and 50s chemical was the way of the future – we had improved on nature itself and now things lasted longer, cleaned better, smelled nicer and generally made us feel like we were looking after ourselves more effectively. And all for a very low price. It was glorious!

Some of the developments and uses of chemicals were incredibly effective and useful, but there were also a lot that have proven extremely difficult for our body to filter out and deal with - and the results are not quite as pretty as that lush pink bubblegum body wash you used as a kid. Many of the chemicals that once seemed so useful were slowly accumulating in our bodies, exhausting our filter systems, changing the way our bodies had to work, and even causing cells to mutate. These are what we mean when we talk about "harmful chemicals"

#### WHY HARMFUL CHEMICALS ARE USED IN SKINCARE

### So... What Should I Avoid?

Time to meet The Nasty Nine.

These are nine ingredients commonly used in skincare, cosmetic and beauty products that are scientifically proven to have negative effects on the human body. Keep an eye out for them, avoid putting them on your skin and your body will love you.

Note that each of these ingredients has many names under which it may be listed. We have provided several alternative names you may find in ingredient listings to help you spot them.

### 01

#### MINERAL OIL

PARAFIN LIQUID PETROLEUM PARAFFIN OIL PARAFFINUM LIQUIDUM WHITE OIL LIQUID PARAFFIN Mineral oil is a byproduct of the distillation process to produce gasoline. Personally, that's enough information for us to decide it shouldn't go on our skin, but mineral oil has been used in skincare and cosmetics for a loooong time due to its ability to prevent moisture loss. (Ever hear of Vaseline, paw paw ointment, baby oil or petroleum jelly?)

Mineral oil acts like cling wrap on the skin, locking in moisture. What this means, though, is that it also traps in sweat and dirt, clogging pores and increasing the likelihood of acne and infection. Even the so-called 'cosmetic-grade' mineral oil is listed as comedogenic, meaning it clogs pores.

The cherry on the top of this "no thanks" sundae, though, is that *it adds nothing to your skin*. Mineral oil does not provide moisture itself nor does it contain nutrients that are beneficial for your skin. (In fact, there is evidence that mineral oil is one of the largest contaminants of the human body.) So why use a pore-clogging possible contaminant on your skin when there are so many 100% natural oils, butters and extracts that can do it actual good?

# 02

#### ALCOHOL ETHANOL

ISOPROPYL ALCOHOL DENAT METHANOL 1-METHYLETHANOL 2- HYDROXYPROPANE 2-PROPANOL ISOPROPANOL BENZYL ALCOHOL BENZYL ALCOHOL BENZEMETHANOL DHENYMETHANOL BENZYLIC ALCOHOL PHENYLMETHYL We always say that alcohol might be fine for drinking, but it is terrible for putting on your skin. Traditional perfumes and other skincare products (such as toners and astringents) use alcohol for its quick drying effect. Theoretically, what this does is make synthetic fragrance stick to your skin and tighten pores to keep out impurities. What it actually does, though, is dehydrate your skin and strip it of its natural oils. This weakens the epidermis and can result in toxic effects such as respiratory failure, vasodilation, hypotension, convulsions and paralysis. Further, prolonged use of alcohol on the skin can cause long-lasting pigmentation and structural damage. Yikes!

There are such a things as "natural alcohols," such as Cetearyl, Stearyl and Cetyl. These are fatty alcohols derived from vegetables and are used to help hold the oil and water together in a product (i.e. emulsify it). In safe concentrations (i.e. very low), these alcohols can be relatively safe for your skin. None of our products contain any alcohol, even these natural varieties.

The alcohols to make sure you avoid all together are those listed on the left. This is far from a complete list of the variations of names for alcohol, but a good rule is to avoid anything with a number in it, anything that ends in -ol and/or contains "-propan-".

O3 T o PTHALATES

BBP: BUTYL BENZYL

DIDP: DI-ISODECYL

DINP: DI-ISONONYLL

DNHP: DI-N-HEXYL

DNOP: DI-N-OCTYL

DEHP: DI-(2-ETHYLHEXYL)

DBP: DI-N-BUTYL

DEP: DIETHYL

These bad boys are used to increase the flexibility and softness of plastics and they are EVERYWHERE. Pthalates appear in deodorants, nail polish, perfumes, hair spray and lotions, plus a lot of household plastics and containers. They have been linked to endocrine disruption, asthma, ADHD, breast cancer, birth defects, obesity and type II diabetes, low IQ, neuro-developmental issues, behavioural issues, autism spectrum disorders, altered reproductive development and male fertility issues. Prolonged exposure is known to damage liver and kidneys.

Phew! That's a VM products!

Phew! That's a long list, huh? Rest assured, you'll find none in any

#### 04 PEGS PLYETHYLENE GLYCOL

PEGS are used as thickeners, solvents, softeners and moisture carriers. They are also used in pharmaceuticals as a laxative. They contain dangerous levels of a toxin called Dioxin, which is used for its antibacterial properties. There is evidence that Dioxin is linked to cancer, nervous system disorders and miscarriages and is known to reduce immunity. PEGS are particularly dangerous for damaged and/or broken skin.

Sulphates are used to create foam and strip grease, so you'll find

them in a lot of shampoos, body washes and facial cleansers.

These are the original engine degreaser, though, and have been

shown to cause skin irritations, eye damage, depression, laboured

Basically, sulphates work to strip your skin of all natural oils

leaving it unprotected against foreign irritants. Inflammatory

skin reactions can include eczema and dermatitis.

#### $\mathbf{07}$ COAL TAR DYES P-PHENYLENEDIAMINE

C.I. #####

These dyes are used predominantly in hair-dyes - particularly darker shades - and in lipsticks. Coal tar is derived from petroleum and is recognised as a human carcinogen. It may also be contaminated with heavy metals and aluminium substrate, which are both toxic to the brain.

On a label, you will see these colours identified by "C.I." followed by a five digit number, which represents its colour index number.

Silicone makes products spread well and feel soft, so you'll often find them in makeup primers, night creams, sweat-resistant sunscreens and moisturisers. Similar to Mineral Oil, silicones stick to the skin and can be hard to remove, clogging pores and making it difficult for skin to breathe, which can cause congestion and breakouts.

They can also slow cell renewal, keeping dead cells stuck longer, which impedes the improvement of conditions such as pigmentation, redness, fine lines and scarring.

Besides the most common silicones listed here, you can spot them by looking for ingredients that end in the following suffixes: "-cone" ; "-conol" ; "-silane" ; and "-siloxanes."

Formaldehyde can be added directly to skincare and beauty products, but it is more often released from the preservatives used. It is commonly found in nail products, hair products, cosmetics and baby products.

It is classified as a carcinogen by the International Agency for Carcinogens and has been banned from use in Japan and Sweden. It is known to cause allergic skin reactions such as rashes and dermatitis and may also be harmful to the immune system.

#### SILICONE

DIMETHICONE CYCLOMETHICONE ACRYLAMIDES ACRYLATES CARBOMERS COPOLYMERS METHACRYLATES POLYBUTENE POLYISOBUTENE POLYVINYLPYRROLIDONE (PVP)

### OOFORMALDEHYDE

QUATERNIUM-15 DMDM HYDANTOIN IMIDAZOLIDINYL UREA DIAZOLIDINYL UREA POLYOXYMETHYLENE UREA 2-BROMO-2-NITROPROPANE-1 3-DIOL (BROMOPOL) GLYOXAL

# 08

breathing and diarrhoea.

Parabens are preservatives used to increase the shelf life of beauty and cosmetic products by preventing the growth of bacteria and mould. Often found in deodorants, hair and skin care, they sometimes don't even make it onto the label.

They have been isolated in breast cancer tumours as they disrupt hormone function by mimicking estrogen, thereby triggering an increase in breast cell division and increasing the risk of tumours. They are also linked to hormone problems in teenagers.

These are what make products last for years, which means once they entered our system (easily done through our hair and skin), they're there to stay. Further, they can have a strong negative impact on our environment as products are washed into the sewage system and have been shown to contaminate marine animals.

### 0bPARABENS

PARAHYDROXYBENZOIC ACID METHYLPARABEN ETHYLPARABEN PROPYLPARABEN BUTYLPARABEN HEPTYLPARABEN

# 05

PEG-7

#### SLS - SLES

SODIUM LAURYL SULPHATE SODIUM LAURETH SULPHATE MONODODECYL ESTER SODIUM SALT SULFURIC ACID SODIUM DODECYL SULPHATE LAURYL ETHER SULPHATE



### Safe Alternatives

Don't despair! It's not all doom and gloom.

For every harmful chemical, there is a natural alternative that works just as well- or better.

At Vanessa Megan, we work hard to produce effective formulations using 100% natural, non-toxic ingredients to ensure your skin is safe in our hands. These alternatives are slightly more expensive for companies to use (trust us- it costs more to make natural, certified organic products) but they are significantly better for your health.

Below is a list of ingredients we use in our products that may look scary at first, but are perfectly safe for your skin and perform the same functions as the nasties we just met without the harmful side effects.



CETEARYL OLIVATE A natural, olive derived emulsifier that helps blend ingredients together to create a smooth, luxurious texture. Also softens skin. Works in conjunction with Sorbitan Olivate.

CITRIC ACID fight wrinkles.

Coconut derived surfactant.

COCO GLUCOSIDE Completely biodegradable, non-ionic surfactant derived from renewable raw materials such as coconut oil and corn and fruit sugars. Mild enough for all skin types.

GLYCERIN A natural lubricant and humectant that balances water levels in skin to facilitate moisture. Also called "glycerine" or "glycerol," smooths and softens skin by helping cells mature properly.

agent.

CHLORIDE properties

LEUCONOSTOC root.

MARIS SAL Sea salt from the Dead Sea in Jordan, contains essential minerals for skin that may help reduce wrinkles, reduce inflammation, improve skin barriar and enhance hydration.

Natural AHA that adjusts skin acidity to promote cell regrowth and naturally exfoliate. May help even skin tone, treat acne and

#### COCAMIDOPROPYL BETAINE

#### GLYCERYL CAPRYLATE

Skin conditioning agent, emollient, surfactant and emulsifying

### GUAR HYDROXYPROPYLTRIMONIUM

A water soluable derivative of guar gum offering conditioning

Natural antimicrobial preservative derived from fermented radish







#### OLIVE SQUALANE

Hydrates, softens, protects and aids in skin regeneration. Reduces wrinkles and promotes healthy skin.

#### P-ANISIC ACID

Natural preservative with antiseptic properties. Derived from anise plant.

#### POTASSIUM SORBATE

Natural, mild preservative used as alternative to toxic parabens. Prevents the growth of microorganisms and protects natural ingredients from spoiling.

#### SODIUM ASCORBYL PHOSPHATE

Vitamin C derivative known to be a powerful antioxidant with collagen stimulating and skin-lightening properties. Influences melanin production to prevent hyperpigmentation, promotes collagen production and improves the skins appearance.

#### SODIUM BICARBONATE

AKA Baking Soda, used to balance skin's pH and aid in exfoliation.

#### SODIUM COCOYL ISETHIONATE

Sodium salt derived from coconut oil, extremely gentle surfactant and emulsifier. Often used in toothpaste and baby soaps.

### SODIUM LAUROYL METHYL ISETHIONATE

Water-soluable, sulfate-free surfactant derived from coconut. Mild, safe and not to be confused with Sodium Lauryl Sulfate (aka SLS, a widely used toxic alternative)

#### SODIUM METHYL OLEOYL TAURATE

Salt of a coconut derived fatty acid. Used as mild surfactant and foaming agent.

#### SORBITAN OLIVATE

A natural, olive derived emulsifier that helps blend ingredients together to create a smooth, luxurious texture. Also softens skin. Works in conjunction with Cetearyl Olivate.

#### XANTHAN GUM

Polysaccaride derived from glucose or sucrose; binder, emulsion stabiliser and viscosity increasing agent. May have skin conditioning properties.



## In Conclusion

There are a lot of nasties out there. But there are also a LOT of really yummy, deeply beneficial ingredients out there as well. It may cost a bit more up front, but the pay off in your health is well worth it.

The truth is that ingredient listings shouldn't be made up of a bunch of things you can't pronounce or don't recognise. In other words... you should never put anything on your skin you wouldn't eat.

THE NASTY NINE

#### VANESSA MEGAN™ advanced organics

In 2001, Vanessa Megan Gray Lyndon, founder and formulator of Vanessa Megan<sup>™</sup>, was inspired by a comment from her best friend that 'you should never put anything on your skin you wouldn't eat.'

This simple concept motivated extensive research into biochemistry and led Vanessa to the discovery of the multitude of synthetic materials found in the products we use on our bodies every day. Studying the power of natural extracts and oils, she began creating skincare and perfume from natural, wild harvested and bioavailable ingredients. Thus, the Vanessa Megan™ brand was born with the goal of getting natural skincare onto every body and into every home.

More than a decade on, Vanessa is known for her uncompromising commitment to clean, synthetic free skincare and Vanessa Megan<sup>™</sup> is considered an Australian pioneer and leader in certified organic skincare. Now trading in premium department stores internationally and boasting the same efficacy results as iconic skincare brands.

With the future in mind, Vanessa Megan<sup>™</sup> offers more than vegan, cruelty free, organic and sustainable brand values- we offer natural skincare that works. Our streamlined skin specialist range has been perfected to benefit all skin types and has been tried and proven to solve any skin concern. These remarkable, awardwinning formulations return skin to its true foundation, creating dermal harmony while remaining genuinely good enough to eat.

#### WWW.VANESSAMEGAN.COM



We are passionate about natural skin care and will continue to research the latest breakthroughs in naturally available bioactive ingredients to make skincare products that are not just natural, but more effective than their chemically derived counterparts.

We hope you find this information helpful and inspires you to share with others. Whether you are a veteran in the natural beauty world or brand new, we would love for you to give Vanessa Megan<sup>™</sup> products a try and tell us what you think. We're confident that once you see how well natural ingredients can work for your skin, how incredible they smell and how luxurious they make you feel, you'll never look back.

#### SHARE THE LOVE

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#### FURTHER QUESTIONS?

We'd love to hear from you! Email us at <a href="mailto:support@vanessamegan.com">support@vanessamegan.com</a>.

#### OUR SOURCES

Gue, Lisa. "What's Inside? That Counts. A Survey of Toxic Ingredients in our Cosmetics" David Suzuki Foundation, October 2010

Panico, A et al. "Skin safety and health prevention: an overview of chemicals in cosmetic products." Journal of preventive medicine and hygiene vol. 60,1 E50-E57. 29 Mar. 2019

Barrett, Julia R. "The ugly side of beauty products." Environmental health perspectives vol. 113,1 (2005).