S.K.I.N. fresh beauty bar

TOXIC INGREDIENT DICTIONARY

"Knowing what is IN your skincare products (what goes ON your skin—60% which is absorbed INTO your body) is as important as knowing what you put IN your body (through food). Know how to read your labels......"

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TOXIC INGREDIENT DICTIONARY

Go to your bathroom cupboard and discover just how "natural" your current skin, hair care and personal care items are! Then make an informed decision about continuing to use them.

While cosmetic chemists argue that there is no difference between a naturally occurring substance and a synthetically derived copy, this is only true on paper, for example take Lavender oil – the natural compounds help heal burns, where the synthetic substance produced in a laboratory, while it may smell the same and look the same of paper, it wont heal like real lavender.

Marketing hype suggesting that certain ingredients are derived from coconut etc, where this is far from the truth. Coconut oil is nothing like coco DEA (coconut-derived), which is made by first converting the coconut oil to its fatty acids and then making the fatty acids obtained from coconut oil react with an ethylene oxide derivative called monoethanolamine. Ethylene oxide is a highly poisonous gas. The resultant product is carcinogenic by itself and can react with nitrite-based compounds to form nitrosamines. Coconut oil is not carcinogenic! Herbal infusions and essentials oils are the only products that show the true meaning of 'plant derived substances'. Sodium lauryl sulfate derived from palm oil and coconut oil is so far from the truth, these are chemicals.

Toxic ingredients to avoid

1,4-dioxane

Description

A carcinogenic contaminant of cosmetic products. Almost 50% of cosmetic containing **ethoxylated surfactants** were found to contain dioxane. (**See Ethoxylated surfactants**).

From Material Safety Data Sheet (MSDS):

1,4-Dioxane may exert its effects through inhalation, skin absorption, and ingestion. 1,4-Dioxane is listed as a carcinogen.

Effects of overexposure: 1,4-Dioxane is an eye and mucous membrane irritant, primary skin irritant, central nervous system depressant, nephrotoxin, and hepatotoxin. Acute exposure causes irritation, headache, dizziness, and narcosis. Chronic inhalation exposure can produce damage to the liver and kidneys, and blood disorders. Medical condition aggravated by exposure preclude from exposure those individuals with disease of the blood, liver, kidneys, central nervous system, and those susceptible to dermatitis.

Toxic ingredients to avoid

2-bromo-2-nitroprpane-1,3-diol (Bronopol)

Description

Toxic causes allergic contact dermatitis

(See Nitrasating agents)

Acetate - amyl, butyl, ethyl and propyl acetate

Α

Description

All the acetates occur naturally in various fruits that give it their distinctive smells, and are used as solvents in nail varnishes and as part of the scents of many perfumes. They are all neurotoxic in varying degrees. It can cause dryness and cracking of the skin, headaches, fatigue and chest pain.

Toxic ingredients to avoid

Aluminium chlorohydrate

Description

This is the active component in many deodorants and antiperspirants. It is noted as a milkd human skin irritant and can cause hair follicles infection. The Journal of Clnical Epidemiology noted a study showing that an increase in the risk of Alzheimer's disease was directly related to the use of aluminium-based antiperspirants.

Toxic ingredients to avoid

Ammonium lauryl sulfate

Description

A surfactant used in shampoos. Increasingly being marketed as a natural substitute for sodium lauryl sulfate. This is basically a marketing ploy. It may be slightly lower in terms of skin irritation in driaze tests and hardly any data exist about other toxicities. So it is not that its been tested and shown to be non-toxic, it hasn't been properly tested. Marketeers of shampoos using sodium lauryl sulfate have argued that because ammonium lauryl sulfate uses ammonium (as in ammonia), rather than sodium (as in salt) it is much more dangerous. More testing should be done with this ingredient.

Toxic ingredients to avoid

Alcohol, Isopropyl (SD-40)

Description

A very drying and irritating solvent and dehydrator that strips your skin's natural acid mantle, making us more vulnerable to bacteria, moulds and viruses. It is made from propylene, a petroleum derivative. It may promote brown spots and premature ageing

Toxic ingredients to avoid

Ammonium Laureth & Lauryl Sulphate (ALES & ALS)

Description

See Anionic Surfactants See Sodium Laureth Sulphate See Nitrosating Agents

Toxic ingredients to avoid

Anionic Surfactants

Description

Anionic refers to the negative charge these surfactants have. They may be contaminated with

nitrosamines, which are carcinogenic. Surfactants can pose serious heatlh threats. They are used in car washes, as garage floor cleaners and engine degreasers—and in 90% of personal-care products that foam.

Sodium Lauryl Sulphate (SLS)

Sodium Laureth Sulphate (SLES)

Ammonium Lauryl Sulphate (ALS)

Ammonium Laureth Sulphate (ALES)

Sodium Methyl Cocoyl Taurate

Sodium Lauroyl Sarcosinate

Sodium Cocoyl Sarcosinate

Potassium Coco Hydrolysed Collagen

TEA (Triethanolamine) Lauryl Sulfate

TEA (Triethanolamine) Laureth Sulfate

Lauryl or Cocoyl Sarcosine

Disodium Oleamide Sulfosuccinate

Disodium Laureth Sulfosuccinate

Disodium Dioctyl Sulfosuccinate etc

Benzophenone-4

Description

This is a fixative usually used in fragrance products. It helps stop breakdown of the product due to ultraviolet rays. It is a suspected mutagen and an eye irritant and has also been known to cause hives and contact dermatitis. It is toxic if ingested.

Toxic ingredients to avoid

Benzalkonium Chloride

Description

Highly toxic, primary skin irritant.

See Cationic surfactants

From Material Safety Data Sheet (MSDS)

Material is highly toxic via oral route.

Effects of overexposure: Mists can cause irritation to the skin, eyes, nose, throat and mucous membranes. Avoid direct contact.

Symptoms: Muscular paralysis, low blood pressure, cns depression and weakness.

Emergency and first aid procedures

Eyes: Corrosive! Immediately wash eyes with plenty of water.

Inhalation: Remove person to fresh air. Give oxygen (if breathing is difficult). Call physician. Ingestion: If conscious, immediately drink large quantities of fluid to dilute and induce vomiting. Call Physician.

Toxic ingredients to avoid

Butylated hydroxyanisole (BHA), not to be confused with BHA – Beta hydroxy acid)

Description

Causes allergic contact dermatitis. It is a preservative and anti-oxidant used in cosmetics. IT is also used to preserve cooking oils from oxidation. In the National Toxicology Program, Sixth Annual Report on Carcinogens is was stated as a 'reasonable anticipated to be a human carcinogen. It is also said to mimic oestrogen, which has been implicated in the rapid increase in breast cancer because they stimulate cell division. BHA can be easily absorbed through the skin. It has been noted for mutagenic, reproductive, neoplastigenic and tumourogenic effects.

Toxic ingredients to avoid

Butylene glycol – methyltrimethylene glycol

Description

Used as a neutraliser, emollient, emulsifier and humectant. There are four butylene glycols which are midly toxic by ingestion, and been noted for experimental reproductive effects.

B

Colours

C

Description

Colours are used in soaps, shampoo's, eye colours, mascara, lipstick, nail varnish etc. The University of Pittsburgh indicates that up to twice as much toxic material can be absorbed into the bloodstream through the skin as through oral ingestion but the public believe that FD colours on labels must be fine as it is used in foods. Some colours are derived from coal tar, some from 'lakes' which may be neurotoxic, and both can be stored in our organs and fatty tissues.

Toxic ingredients to avoid

Cetrimonium chloride

Description

See Cationic Surfactants

Toxic ingredients to avoid

Chloromethylisothiazolinone and Isothiazolinone

Description

Causes contact dermatitis

From Material Safety Data Sheet (MSDS):

Eye Contact: Corrosive to the eyes with possible permanent damage.

Skin contact: Corrosive to the skin, possibly resulting in third degree burns. Can be harmful is absorbed. Can cause allergic contact dermatitis in susceptible individuals.

Ingestion: Can be fatal.

Inhalation: Can be corrosive to the mucous membranes and the lungs. Can cause an allergic reaction in susceptible individuals.

Toxic ingredients to avoid

Cocoamidopropyl Betaine

Description

From Material Safety Data Sheet (MSDS):

Can cause eye and skin irritation.

Toxic ingredients to avoid

Cocoyl Sarosine

Description

See Nitrosating agents

Toxic ingredients to avoid

Cyclomethicone

Description

See Silicone derived emollients

DEA (diethanolamine), MEA (Monoethanolamine), & TEA (triethanolamine)



Description

Often used in cosmetics to adjust the pH, and used with many fatty acids to convert acid to salt (stearate), which then becomes the base for a cleanser, TEA causes allergic reactions including eye problems, dryness of hair and skin, and could be toxic if absorbed into the body over a long period of times.

These chemicals are already restricted in Europe due to known carcinogenic effects. Dr. Samuel Epstein (Professor of Environmental Health at the University of Illinois) says that repeated skin applicationsof DEA-based detergents resulted in a major increase in the incidence of liver and kidney cancer.

Despite warnings and recommendations to industry from the FDA dating back to the 1970's concerning its relationship to cancers in animals tested, and in 1987 the German Federal Health Office notified manufacturers about the inherent problems of using DEA and TEA and discouraged manufacturers from using these chemicals. Repeated application to mouse skin of DEA or cocamide DEA induced liver and kidney cancer and accumulated in organs such as the brain. See Nitrosating agents

From Material Safety Data Sheet (MSDS):

Health Hazard Acute and Chronic: Product is severely irritating to the body tissues and possibly corrosive to the eyes.

Explanation Carcinogenicity: Amines react with nitrosating agents to form nitrosamines, which are carcinogenic.

Toxic ingredients to avoid

Diazolidinyl urea

Description

Established as a primary cause of contact dermatitis (American Academy of Dermatology). Contains formaldehyde, a carcinogenic chemical, is toxic by inhalation, a strong irritant, and causes contact dermatitis.

See Formaldehyde

From Material Safety Data Sheet (MSDS):

Causes severe eye irritation. May cause skin rritation.

Sings and Symptoms of exposure:

Symptoms of inhalation: If misted, will cause irritation of mucous membranes, nose, eyes and throat. Coughing, difficulty in breathing.

Symptoms of skin contact: Contact causes smarting and burning sensations, inflammation, burns, painful blisters. Profound damage to tissue.

Symptoms of eye contact: Will cause painful burning or stinging of eyes and lids, watering of eyes and inflammation of conjunctiva

Toxic ingredients to avoid

Dimethicone

Description

See Silicone derived emollients

Dimethicone Cocolyol

Description

See Silicone derived emollients

Toxic ingredients to avoid

Dimethylol dimethyl hydantoin

Description

Usually called DMDM hydantoin, and used as a preservative. It is a confimed carcinogen, experimental tumourogen, teratogen and mutagen, and also noted for causing degenerative brain changes and central nervous system abnormablities. DMDM can release formaldehyde, which is a carcinogen.

Toxic ingredients to avoid

Disodium Dioctyl Sulfosuccinate

Description

See Anionic surfactants

Toxic ingredients to avoid

Disodium Laureth Sulfosuccinate

Description

See Anionic surfactants
See Ethoxylated surfactants

Toxic ingredients to avoid

Disodium Oleamide Sulfosuccinate

Description

See Anionic Surfactants

Toxic ingredients to avoid

DMDM Hydantoin

Description

Contains formaldehyde. See formaldehyde

Ethoxylated Surfactants

E

Description

Ethoxylated surfactants are widely used in cosmetics as foaming agents, emulsifiers and humectants. As part of the manufacturing process the toxic chemical 1,4-dioxane, a potent carcinogen is generated. On the label,, they are identified by the prefix "PEG", "polyethylene", "polyethylene glycol", polyoxyethylene", "-eth-" or "-oxynol-". See 1,4-Dioxane

FD & C Colour Pigments

F

Description

Synthetic colours made from coal tar. Contains heavy metal salts that deposit toxins into the skin, causing skin sensitivity and irritation. Animal studies have shown almost all of them to be carcinogenic

Toxic ingredients to avoid

Formaldehyde

Description

Used as a preservative, and the most common and most toxic chemical in daily use. It is found in everything from chipboard to cushions to paint, rubber underlay, carpet cleaning sprays, paper etc. It is a noted carcinogen and can cause damage to the DNA, and recognised as a main trigger for chemical sensitivities.

Toxic ingredients to avoid

Fragrance

Description

Fragrance on a label can indicate the presence of up to four thousand separate ingredients, many toxic or carcinogenic. Symptoms reported to the USA, FDA include headaches, dizziness, allergic rashes, skin discoloration, violent coughing and vomiting, and skin irritation. Clinic observation proves fragrances can affect the central nervous system, causing depression, hyperactivity and irritability

Hexachlorophene



Description

This chemical is still used in 'baby oil, baby powder, brilliantine hairdressings, cold creams, emollients, deodorants, face masks, hair tonics and medicated cosmetic products. It is derived from the deadly organochlorine 2,4,5-T. It is a known neurotoxin (central nervous system poison).

In two separate major accidents, hexachlorophene has been implicated in the deaths or malformations of infants in Sweden, 5 per cent of babies washed in a soap solution containing hexachlorophene (0.3 to 3 per cent) had severe malformations including eye and central nervous system defects. In France 39 children died from poisoning by a talc that had 6 per cent hexachlorophene content, and 206 children suffered severe illness. Hexachlorophene is still allowed to be used for both animals and humans.

Toxic ingredients to avoid

Hydrolysed Animal Protein

Description

See Nitrosating agents

Toxic ingredients to avoid

Hydroxyanisole

Description

Is used in a wide range of cosmetics as an anti-oxidant. There are two types, and are both human poisons by ingestion and have systemic effects by inhalation. These effects include irritability, weakness and headache. They are also skin and eye irritants. The manufacturers' own Cosmetic Ingredient Review (CIR) panel has concluded that this is unsafe to use in cosmetics.

Toxic ingredients to avoid Imidazolindinyl urea

Description

The trade mark for this chemical is Germall 115. Releases formaldehyde, a carcinogenic chemical, into cosmetics at over 10 degree Celsius. Toxic.

See formaldehyde

See Nitrosating agents

Lanolin

L

Description

Any chemical used on sheep will contaminate the lanolin obtained from the wool. The majority of lanolin used in cosmetics are highly contaminated with chlorinated organo pesticides like DDT.

Toxic ingredients to avoid

Laureth

Refers to a group of surfactants used in shampoos and liquid soaps, and has been noted that it may be contaminated by 1,4 dioxane, a carcinogen. They are poisons by ingestion and are a skin and eye irritant and experimental mutagens.

Toxic ingredients to avoid

Lauryl dimonium hydrolysed collagen

Description

See Cationic surfactants

Toxic ingredients to avoid

Lauryl or Cocoyl Sarcosine

Description

See Anionic Surfactants

Toxic ingredients to avoid

Lauryl Sarcosine

Description

See Nitrosating agents

Toxic ingredients to avoid

Liquidum Paraffinum

Description

Liquidum Paraffinum is an exotic sounding way to say mineral oil (!) See Mineral Oil.

MEA Compounds

Description

See Nitrosating agents

Toxic ingredients to avoid

Methyl methacrylate (also ethyl acrylate)

Description

Frequently used in artificial nail preparations, methyl methacrylate is noted as an experimental teratogen and has reproductive effects. It is also a suspected carcinogen, tumourogen and mutagen. It has effects on the central nervous system, sleep disorders, anorexia and low blood pressure. It is associated with inflammation of nasal cavity and degeneration of the olfactory sensory epithelium in animal tests, and is a skin and eye irritant, and may be responsible for nerve damage and skin effects.

Toxic ingredients to avoid

Methyl chloride

Description

A common chemical used in hair spray. It is a confirmed carcinogen and tumourogen and is noted for systemic effects such as convulsions and disruptions of sleep patterns, and is an eye and skin irritant. It is also noted for preventing the red blood cells from carrying oxygen.

Toxic ingredients to avoid

Methylisothiazolinone and Methylchloroisothiazolinone

Description

Both causes cosmetic allergies

Toxic ingredients to avoid

Mineral Oil - petrolatum

Description

Petroleun by-product that coats the skin like plastic, clogging the pores. Interferes with the skin's ability to eliminate toxins, promoting acne and other disorders. Slows down skin function and cell development, resulting in premature aging. Used in many products (baby oil is 100% mineral oil!) Any mineral oil derivative can be contaminated with cancer causing PAH's (Polycyclic Aromatic Hydrocarbons).

Description

It is widely found though 'baby oils and creams' and in other cosmetics. They are manufactured from crude petrol, and are probably carcinogenic as 'analysis of mineral oils used for medicinal and cosmetic purposes revealed the presence of several carcinogenic polycyclic aromatic hydrocarbons which are in the NTP's Eighth Report of Carcinogens, including benzol(b)fluoranthene, benzol(k)fluoranthene, and benzol(a)pyrene. They are noted as human



teratogens by inhalation causing testicular tumour in the foetus. They are skin and eye irritants and may be implicated in aspirational pneumonia.

- Mineral oil
- Liquidum paraffinum
- Paraffin Oil
- Paraffin wax
- Petrolatum

Nitrosating Agents

N

Description

The following chemicals can cause nitrosamine contamination, which have been determined to form cancer in laboratory animals. There are wide and repeated concerns in the USA and Europe about the contamination of cosmetics products with nitrosamines.

- 2-brom-2-nitropropane-1,3-diol
- Cocoyl Sarcosine
- DEA compounds
- Imidazolidinyl Urea
- Formaldehyde
- Hydrolysed Animal Protein
- Lauryl Sarcosine
- MEA compounds
- Quaternium-7,15,31,60,etc
- Sodium Lauryl Sulphate
- Ammonium Lauryl Sulfate
- Sodium Laureth Sulfate
- Sodium Methyl Cocoyl Taurate
- TEA compounds

Toxic ingredients to avoid

Nitrosamines

Description

Nitrosamines have been known about for over 100 years, then two British scientists reported nitrosamines were tested and produced liver tumours in rats. Nitrosamines are experimental carcinogens that are formed by action of nitrites on amines. They occur in tobacco, in bacon preserved with sodium nitrate and in shampoos that contain DEA and TEA. In 1970 a study showed that around 40 per cent of cosmetics were contaminated with nitrosamines, and the FDA put out a warning against DEA and TEA. The German Federal Health office in 1987 also issued a recommendation against using DEA and TEA. It has shown to increase human cancers.

Paraben

preservatives (methyl, propyl, butyl, and ethyl)

P

Description

Used as inhibitors of microbial growth and to extend shelf life of products. Widely used even though they are known to be toxic. Have caused many allergic reaction and skin rashes. Highly toxic. More recent research at Brunel University in the United Kingdom has found that parabens have been found in breast tumours, as it mimics oestrogen which can also have significant effects on lowering sperm count, osteoporosis and auto-immune disease.

From Material Safety Data Sheet (MSDS):

Emergency overview:

Warning! Harmful if swallowed or inhaled. Causes irritation to skin, eyes and respiratory tract. May cause allergic skin reaction.

Skin contact: Causes irritation to skin. Symptoms include redness, itching, and pain. May cause allergic skin reactions.

Eye contact: Causes irritation, redness, and pain.

Toxic ingredients to avoid

Paraffin wax/oil

Description

Paraffin wax is mineral oil wax. See Mineral Oil

Toxic ingredients to avoid

Petrolatum

Description

Petrolatum is mineral oil jelly. See Mineral Oil.

Toxic ingredients to avoid

Polyethylene Glycol (PEG) compounds

Description

Potentially carcinogenic petroleum ingredient that can alter and reduce the skin's natural moisture factor. This could increase the appearance of ageing and leave yo more vulnerable to bacteria. Used in cleansers to dissolve oil and grease. It adjusts the melting point and thickens products. Also used in caustic spray-on oven cleaners.

PEG 200 – 400 may be allergens

PEG and PEG 1000 are listed as questionable carcinogens and experimental tumourogens and have had experimental reproductive effects.

PEG 75 lanolin can cause hives and eczema.

See Ethoxylated surfactants

Toxic ingredients to avoid

Potassium Coco Hydrolysed Collagen

Description

See Anionic surfactants

Toxic ingredients to avoid

Propylene/Butylene Glycol

Description

Propylene glycol (PG) is a petroleum derivative. It penetrates the skin and can weaken protein and cellular structure. Commonly used to make extracts from herbs. PG is strong enough to remove barnacles from boats! The EPA considers PG so toxic that is requires workers towear protective gloves, clothing and goggles and to dispose of any PG solutions by burying them in the ground. Because PG penetrates the skin so quickly, the EPA warns against skin contact to prevent consequences such as brain, liver, and kidney abnormalities. But there isn't even a warning label on products such as stick deodorants, where the concentration is greater than in most industrial applications.

From Material Safety Data Sheet (MSDS):

Health Hazard Acute and Chronic.

Inhalation: May cause respiratory and throat irritation, central nervous system depression, blood and kidney disorders. May cause Nystagmus, Lymphocytosis.

Skin: Irritation and conjunctivitis. Eyes: Irritation and conjunctivitis.

Ingestion: Pulmonary oedema, brain damage, hypoglycaemia, intravascular hemolysis. Death

may occur.

Toxic ingredients to avoid

PVP/VA Copolymer

Description

A petroleum-derived chemical used in hairsprays, wavesets and other cosmetics. It can be considered toxic, since particles may contribute to foreign bodies in the lungs of sensitive persons

Quaternium-7, 15,31, 60, etc

Description

Toxic, causes skin rashes and allergic reactions.

See Nitrosating agents.

From Material Safety Data Sheet (MSDS):

Skin: Prolonged or repeated exposure may cause skin irritation, may cuase more severe response if skin is damp.

May be a weak skin sensitizer in susceptible individuals at greater than 1% in aqueous solution



Silicone derived emollients

Description

Silicone emollients are aocclusive—that is they coat the ski, trapping anything beneath it, and do not allow the skin to breathe (much like plastic wrap would do.)

Recent studies have indicated that prolonged exposure of the skin to sweat, by occlusion, causes skin irritation. Some synthetic emollients are known tumour promoters and accumulate in the liver andlymph nodes. They are also non-biodegradable, causing negative environmental impact.

- Dimethicone
- Dimethicone Copolyol
- Cyclomethicone

Toxic ingredients to avoid

Sodium Lauryl sufate (SLS)

Description

Sodium Lauryl Sulfate is commonly used in shampoos, toothpastes and foaming products. Even though there are many different we sites stating the potential harm and toxicity of SLS, it has been stated now that Dr Keith Greens study was taken out of context in regards to SLS being a cancer causer. Even though it is suspected as a carcinogen we can neither say it is accurate or not. Other studies though do believe it is a skin and eye irritant, and also found to be teratogenic and leaves residues in the brain, heart, lungs and liver. SLS is a strong irritant to mucous membranes allowing the passage of other toxins and has been implicated in the case of mouth ulcers. The study by Dr Green while generally taken out of context did establish that it has an ability to prevent eyes form healing after they had been damaged. For these other reasons alone it is enough for us to ensure we don't use this ingredients.

Bibliography

Natural Organic Hair and Skin Care Skin Deep Newscientist studies

Other independent studies

By Aubrey Hampton By Keven Farrow Research on the internet

Research on the internet