

About Dermafirm 10FREE

DERMAFIRM, INC.'s 10Free products prescribed by its own hypo-allergenic prescriptions do NOT contain any harmful chemicals including tar, paraben, ethylene oxide, benzophenone, diazolidinyl urea, artificial coloring, hydroquinone and triclosan, and thus safe for sensitive skin and for all ages.

- **#1 Tar**

It refers to tar color used in cosmetics. Tar color is generally specified as Yellow 0, Red 0, Blue 0, etc. in a labeling of cosmetics ingredients. This tar color is primarily derived from coal tar which is a by-product of coal and synthesized from benzene or naphthalene contained in coal. Tar color is normally used for textile dyes, however, less poisonous tar color is used for food (frozen desserts, soft drinks and snacks) or cosmetics. When getting into eyes, this tar color can irritate mucous membrane, and when getting into stomach, it can hinder digestive enzymes from working properly or cause allergic reaction or cancer as a carcinogen. Tar color can also be a main reason for various kinds of diseases as it is accumulated in the body rather than excreted from the body.

- **#2 Paraben**

Paraben, suspected to be one of endocrine disruptors, is classified as a carcinogenic substance and widely used preservatives in cosmetics. There are different types of paraben such as methyl paraben, ethyl paraben, butyl paraben, propyl paraben, isobutyl paraben, and they are compounded with other chemical substances to have more powerful preservative effects. Because of its own poisonousness, paraben is restrictively used in products at individual concentrations up to 0.4% and mixed concentrations up to 0.8%. It can cause skin irritation or cancer or increase cancer cells, and moreover, can induce body dysmorphic disorder as it accelerates aging and disturbs the endocrine system. It also increases various kinds of skin problems and risk of infertility in men.

- **#3 Ethylene oxide**

Ethylene oxide is known as a carcinogenic substance and can be mutagenic as biochemically having high reactivity. It can also damage the nervous system and harm marine species. It should be carefully treated because of its high inflammability and explosiveness.

- **#4 Benzophenone**

Benzophenone prevents scents from disappearing so it must be added to the products which are processed with synthetic perfume. Benzophenone-3 and benzophenone-5 are used as an ultraviolet light absorber and a sunscreen ingredient. There have been many controversies over harmfulness of benzophenone for a long time. It is known as a potential hormone disruptor, causes allergies and pimples and is suspected to have toxic effects in skins, sensory organs and endocrine systems. In 2002, Japan has classified benzophenone as a harmful substance in laws and urged not to use it for pregnant women and kids. California has classified benzophenone as a suspected teratogenic substance.

- **#5 Diazolidinyl urea**

According to the report by the American Skin Society, it is a main reason for causing contact dermatitis. Its market name is Germall II and Germall 115 which have weak preservative effects, requiring to be used with other preservatives. Especially, Germall 115 releases a toxic substance such as formaldehyde at 10 degrees Celsius.

- **#6 DMDM Hydantoin**

DMDM Hydantoin is generally used for cosmetics with other preservatives releasing formaldehyde as a formaldehyde-donor. Formaldehyde can cause irritation in skin or respiratory system and increase pulse rates resulting in palpitation. People exposed to formaldehyde showed symptoms of arthralgia, allergies, depression, headache, chest pain, external ear infection, chronic fatigue, dizziness and insomnia. Formaldehyde

also can worsen a cold possibly resulting in asthma, weakening the immune system or causing cancer. Almost all market products including skin products, body and hair care products, antiperspirants and nail varnish contain such toxic chemical substances which release formaldehyde.

- **#7 Zinc pyrithione**

Zinc pyrithione effectively eliminates dandruff-causing germs and is best known for its use in treating dandruff, particularly in hair cosmetics as anti-dandruff products.

However, it can irritate skins at over 1% concentration and has little effect at less than 0.01% concentrations. Due to its low solubility in water and greater specific gravity, it is difficult to be evenly spread. Moreover, as it is reported that zinc pyrithione can cause contact dermatitis and has environmental toxicity, it is restricted to be used at high concentrations.

- **#8 Hydroquinone**

Hydroquinone was firstly reported as skin depigmentation agent and is now used as a topical application in skin whitening to reduce the color of skin as medical treatment for freckles, etc. Most countries including the United States and the European Union currently banned hydroquinone from being used in cosmetics and restrictively allow it to be used in some medicines with prescriptions as it can cause cancer and ochronosis. Hydroquinone has cytotoxicity, can irritate skin, and is suspected to cause exogenous ochronosis, spotted leukoplakia, potential mutation and cancer.

- **#9 Artificial coloring**

Artificial coloring, derived from coal tar, is used for making colors more vivid.

Reportedly, it can cause allergies, fatigue, rashes, discursiveness and headache.

- **#10 Triclosan**

Triclosan, suspected to be one of endocrine disruptors, is used as deodorants and antibacterial cleaners. It has similar structures with herbicide, weakens immunity and fertilizing capacity, and disturbs sex hormones.

- **ASK YOUR SKINCARE PROVIDER IF ALL THEIR SKINCARE PRODUCTS ARE 10FREE LIKE DERMAFIRM'S 10FREE!**