

## Glossary:

**2-BROMO-2-NITROPROPANE-1,3-DIOL** - An antimicrobial and preserving agent with known immunotoxicity (immune system toxicant), skin irritant, neurotoxicity, endocrine disruption. There are also possible contamination concerns with formaldehyde and nitrosamines. Nitrosamines are known carcinogens. While this ingredient isn't used as frequently, it's a higher hazard than other preservatives.

**Arginine (L'Arginine)** - A naturally occurring amino acid that's found in various foods, but has links to possible neurotoxicity, increased cancer risk, endocrine disruption and is a human growth hormone (HGH) when used on its own. Considered a low hazard, but shows some effects on animals at low doses.

**Butylene Glycol** - Petroleum based humectant that can cause skin irritation, with higher doses leading to endocrine disruption, possible neurotoxicity. The hazard on this is low, but given that it's petroleum based and a glycol, we steer clear of it.

**Cetareth-20** - This ingredient has contamination concerns with 1,4-dioxane, with links to neurotoxicity, and skin irritation. It is also a known penetration enhancer, which makes it a more moderate hazard.

**Disodium Cocoamidopropionate** - A fatty acid derived from coconut, it has a known immunotoxicity and has contamination concerns with nitrosamines, which makes this a moderate hazard.

**Disodium EDTA** - Penetration enhancer, possible endocrine disruption (higher doses), reproductive /developmental toxicity, possible carcinogen. Due to limited studies, this is a lower to moderate hazard.

**DMDM Hydantoin** - Preservative that releases formaldehyde. Known immunotoxicity, skin irritant/allergen.

**Geraniol** - An essential oil and alcohol that is also used as an effective pesticide. Is known to cause Immunotoxicity, skin irritation, possible neurotoxicity.

**Iodopropynyl Butylcarbamate** - possible liver toxicity, possible allergen

**Limonene** - Citrus peel extract and essential oil, also contains insecticidal compounds and causes possible immunotoxicity, known skin irritant.

**Linalool** - Citrus peel extract and essential oil, also contains insecticidal compounds and causes possible immunotoxicity, possible increased cancer risk, skin irritant.

**Methylchloroisothiazolinone** - Preservative with antibacterial and antifungal properties. One of the most potent allergenic preservatives causing immunotoxicity, skin irritation and allergies, however, has conflicting evidence on cancer risk.

**Methylisothiazolinone** - preservative causing possible immunotoxicity, possible neurotoxicity.

**Myristyl alcohol** - skin irritation, organ toxicity. Not highly hazardous, however, high doses may cause cancer.

**Phenoxyethanol** - Preservative that's used in vaccines, detergents and other chemicals. Part of the glycol family causing possible immunotoxicity, neurotoxicity, endocrine disruption, increased cancer risk.

**Propylene Glycol** - immunotoxicity, skin irritant, allergen, increased cancer risk, penetration enhancer.

**Polysorbate 20** - Surfactant and emulsifier, can cause skin irritation and endocrine disruption at **high doses.**

### **Quaternium**

**15** - Preservative that releases formaldehyde. Used in cleaners, paints and beauty products. Causes known immunotoxicity, skin toxicity.

**Tetrasodium EDTA** - Penetration enhancer, can cause skin irritation. Not hazardous on its own, but given that it's a penetration enhancer, should be avoided.

**Tocopheryl Acetate** - May be contaminated with Hydroquinone (known carcinogen), possible skin irritant.

**Triethanolamine** - Used to balance the pH in beauty products. Known immunotoxicity, skin irritant, limited evidence of cancer risk.

## Sources

<http://www.cosmeticsdatabase.com>

<http://www.wikipedia.com>

<http://www.natural-skincare-authority.com>

<http://www.bubbleandbee.com/Chemical%20Database.html>

<http://pesticideinfo.org>

<http://www.getipm.com>