

# Synergie Skin Care & Synergie Minerals: The 'Nasties'

## **Artificial Color** (look for D&C or FD&C Dyes)

Uses in skincare & makeup products:

- Appearance only and provides pigment to makeup – no functional benefit

Possible side effects:

- Linked to some cancers (e.g. FD & C Red 40 linked to breast cancer)
- Can penetrate skin and carry impurities, due to small particle size
- Allergy and skin irritation
- Comedogenic

## **Artificial Fragrance** (look for 'Fragrance ± number' or 'Parfum ± number')

Uses in skincare & makeup products:

- No functional skin benefit
- It may take a mixture of > 200 artificial chemicals to achieve a pleasant fragrance

Possible side effects:

- Forms carcinogens in the body
- Can cause neurological problems
- Allergy and irritation
- Photosensitivity
- Nausea
- Headaches (also due to inhaled vapor)

## **Bismuth/Bismuth oxychloride**

Uses in makeup products:

- Used to give pearlescent shimmer

Possible side effects:

- Known as an irritant
- Causes prickling or itching on the skin
- Clogs pores

## **Chemical Absorbing Sunscreens** (also called organic sunscreen)

Examples:

- Octyl Methoxycinnamate
- Oxybenzone
- Butyl Methoxydibenzoylmethane
- Octylcrylene
- Avobenzone
- Octinoxate
- Octisalate
- Homosalate
- PABA

Uses in skincare & makeup products:

- UVA and UVB sun protection

Possible side effects:

- Hormone disruptors
- Early puberty
- Estrogenic effect on tumors
- Low fertility
- May contribute to breast and prostate cancer
- Low molecular weight enables absorption into blood stream
- Accumulates in cells
- Allergy and skin irritation
- Photosensitivity
- Creates free radicals which can damage DNA

## **Dimethicone and Other Silicones**

Uses in makeup products:

- Used to create pressed powders
- Used in liquid foundations and primers to create a silky texture and allow for smooth application

Possible side effects:

- Linked to 'acne cosmetica', i.e. comedones (blackheads and whiteheads)
- May lead to skin congestion
- Causes minerals in pressed powder to stick to the skin, preventing the skin from 'breathing'

## **Hydroquinone**

Uses in skin care products:

- Skin lightener
- Treating hyperpigmentation (freckles, scars). Note: effect is temporary, only while using the product.

Possible side effects:

- Sensitivity: redness/itching
- Known carcinogen in animals
- Ongoing use may cause ochronosis (blue-black pigmentation with caviar-like bumps on the skin)

## **Isopropyl Alcohol** (petroleum derived)

Uses in skin products:

- Solvent
- Skin dehydrator

Possible side effects:

- Skin dryness/irritation
- Penetration enhancer of undesirable ingredients
- Toxic vapours if excess inhaled
- Fatal if 1 fl oz or more ingested
- Headaches
- Nausea

## **Lead and Other Heavy Metals** (e.g. Cadmium)

Uses in makeup products:

- Potential contaminant in pigments used in makeup, especially red lipsticks

Harmful effects:

- Toxins: anemia, kidney & brain damage (high doses)

## **MEA, DEA, TEA** (Monoethanolamine / Diethanolamine / Triethanolamine)

Uses in skin products:

- pH controller
- Foam enhancer

Possible side effects:

- Possibly carcinogenic
- Skin irritant

## **Mineral Oil / Petrolatum** (e.g. Baby Oil)

Uses in skin products & makeup products:

- Gives the 'illusion' of moisturizing due to oily nature but sits on surface only
- Petroleum (gasoline)-derived occlusive

Possible side effects:

- Pore clogging
- Irritation and allergy due to possible contaminants from petroleum refining

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## Mineral Oil / Petrolatum continued

- May impair natural skin processes ('cling wrap' effect) and prevent nutrient absorption/toxin release

## Palm Oil

Uses in skincare products:

- Moisturizing and occlusive oil in lipsticks, skin care, lipstick and other makeup

Harmful effects:

- While not harmful with topical use, cultivation of palm trees causes deforestation and destruction of natural habitats and contributes to greenhouse gases

## Parabens and Artificial Preservatives

Examples:

- Parabens (methyl, ethyl, and propyl)
- MDM Hydantoin (formaldehyde)
- Urea (Imidazolidinyl urea or Germa)
- Methyl isothiazoline
- Methylchloroisothiazoleone

Uses in skincare & makeup products:

- Prevents microbial contamination in makeup

Possible side effects:

- Respiratory irritation (asthma trigger)
- Allergy and skin irritation
- Forms carcinogens
- Artificial preservatives release 'formaldehyde donors' and form carcinogens

## PEG (Polyethylene Glycol)

Uses in skincare products:

- Skin lubricant
- Penetration enhancer
- Emulsifier in many skin products

Possible side effects:

- Produces carcinogens
- Irritation to damaged skin
- Increases penetration of undesirable ingredients
- Possible irritation from impurities

## Phthalates

Examples:

- Dibutylphthalate (DBP)
- Dimethylphthalate (DMP)
- Diethylphthalate (DEP) (banned in the EU)

*Phthalates are not mandatory to be listed on labels as part of artificial fragrance ingredients.*

Uses in skincare & makeup products:

- Flexible film formers (hairspray)
- Solvents
- Perfume fixatives

Possible side effects:

- Hormone disruptor
- Organ and system toxicity
- Prenatal exposure linked to decreased male fertility

## Plastic Microbeads

Uses in skincare products:

- Physical exfoliant in skin scrubs

Harmful effects:

- Harmful to the environment: wash into sewers and ultimately waterways
- Bind toxins that harm humans and other species

## Propylene Glycol

Uses in skincare products:

- Emollient (provides 'slip')
- Solvent
- Viscosity decreaser
- Penetration enhancer

Possible side effects:

- Eye/skin irritant
- Rapid skin penetration, which may cause brain, liver, kidney abnormalities (EPA requires workers to use protective clothing)

## SLS (Sodium Lauryl Sulfate) / SLES (Sodium Laureth Sulfate)

Uses in skincare products:

- Detergent (foaming agent)
- Base for cleaners, liquid soaps, shampoo, bubble bath

Possible side effects:

- Skin and scalp rash and irritation
- Oil and moisture loss
- Eye irritation
- Forms carcinogenic nitrates
- Absorbed into bloodstream
- Greater uptake in rapidly dividing cells and young tissues (e.g. children)
- Retained in organs (brain, heart, liver, eyes)

## Talc

Uses in makeup products:

- Used as a cheap bulking agent for powdered products
- Used to provide softness, absorbency, and moisture

Possible side effects:

- Linked to ovarian cancer
- May contain traces of lead

