**Typical preservatives in skin care products on the market:**

* Tocopherol acetate
	+ Vitamin E derivative, used primarily as an anti-oxidant in cosmetic industry, provides longer shelf life
* Propylene and butylene glycols
	+ petroleum based product, helps prolong shelf life and prevents drying out of product, decreases viscosity, prevents crystallization of insoluble components, helps solubilizing of aqueous insoluble ingredients, used to stabilize fragrance and flavour compounds, prevents spoilage by microorganisms (gram +/-, yeasts, molds)
* Disodium and tetrasodium EDTA
	+ Complexes metal ions in aqueous environments, disodium EDTA has limited solubility in water (typically 0.1% added to warmed up water phase, suitable for pH neutral or slightly acidic products), tetrasodium EDTA has high solubility in water (preferable for gels, serums and surfactant systems, may raise the pH but can be adjusted through addition of citric acid), often works in tandem with another preservative
* Diazolidinyl and imidazolidinyl urea
	+ Formaldehyde-releasing agents, most commonly used together with parabens (one of the most common preservative systems in world, common in cosmetic industry)
* Parabens
	+ Parahydroxybenzoates, family of commonly used preservatives in cosmetic products, prevent growth of microorganisms, the most commonly used are methylparaben, propylparaben, butylparaben, and ethylparaben
* Phenoxyethanol
	+ Stable to aqueous hydrolysis, low water solubility and evaporation rate, stable at high temperatures, nonionic and effective in anionic and cationic systems, broad spectrum antimicrobial activity against bacteria, yeasts, and mold
* Methylisothiazolinone
	+ Powerful biocide and preservative, allergenic and cytotoxic, use is controversial (insufficient information)
* Ascorbyl palmitate
	+ Ester formed from ascorbic acid and palmitic acid creating a fat-soluble form of vitamin C, antioxidant food additive (E304) used as a preservative and colour stabilizer
* Benzoic acid
	+ Major weak organic acid food preservative, anion cumulates in cytoplasm, have been shown to cause oxidative stress (mode of action may involve disruption of membrane homeostasis)
* Benzyl alcohol

Used in cosmetic formulations as a fragrance component, preservative, solvent, and viscosity-decreasing agent