Common chemicals found in cosmetics

Chemical	Description	Commonly found in...	What to look for on the label
1,4-DIOXANE	A carcinogen linked to organ toxicity. Not found on ingredient labels, because it's a contaminant created when common ingredients react when mixed together.	☐ Products that create suds: ☐ Shampoo ☐ Handwash ☐ Bubble bath ☐ Foaming cleansers	☐ Sodium laureth sulfate ☐ PEG ☐ Chemicals that include xynol, ceteareth and oleth
BENZOPHENONE & derivatives	Common sunscreen ingredients. Benzophenone is persistent, bioaccumulative and toxic - with links to cancer, endocrine disruption, and organ system toxicity.	☐ Lip balm ☐ Nail polish ☐ Foundations ☐ Baby sunscreens ☐ Fragrance ☐ Shampoo ☐ Conditioner ☐ Hair spray ☐ Moisturisers	☐ Benzophenone ☐ Oxybenzone ☐ Sulisobenzone ☐ Sulisobenzone sodium
BUTYLATED COMPOUNDS	Used as preservatives -linked to several health concerns including endocrine disruption and organ-system toxicity.	☐ Lip products ☐ Hair products ☐ Makeup ☐ Sunscreen ☐ Antiperspirant/deodorant ☐ Fragrances ☐ Creams	☐ BHA ☐ BHT
COAL TAR	A known carcinogen derived from burning coal. Application of and exposure to coal tar produce skin tumors and neurological damage.	☐ Shampoos ☐ Soaps ☐ Hair dyes ☐ Lotions	☐ Coal tar solution ☐ Tar ☐ Coal ☐ Carbo-cort ☐ Coal tar solution USP ☐ Crude coal tar ☐ Estar ☐ Impervotar ☐ KC 261 ☐ Lavatar ☐ Picis carbonis ☐ Naphtha ☐ High solvent naphtha ☐ Naphtha distillate ☐ Benzin B70 ☐ Petroleum benzin [3,4]

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ETHANOLAMINE COMPOUNDS (MEA, DEA, TEA AND OTHERS)	Linked to liver tumors.	☐ Soaps ☐ Shampoos ☐ Hair conditioners ☐ Hair dyes ☐ Lotions ☐ Shaving creams ☐ Paraffin and waxes ☐ Household cleaning products ☐ Pharmaceutical ointments ☐ Makeup ☐ Fragrances ☐ Sunscreens	☐ Triethanolamine ☐ Diethanolamine ☐ DEA ☐ TEA ☐ Cocamide DEA ☐ Cocamide MEA ☐ DEA-cetyl phosphate ☐ DEA oleth-3 phosphate ☐ Lauramide DEA ☐ Linoleamide MEA ☐ Myristamide DEA ☐ Oleamide DEA ☐ Stearamide MEA ☐ TEA-lauryl sulfate
FORMALDEHYDE AND FORMALDEHYDE-RELEASING PRESERVATIVES	Formaldehyde and formaldehyde-releasing preservatives (FRPs) are linked to cancer and allergic skin reactions.	☐ Nail products ☐ Hair products ☐ Baby shampoo ☐ Body wash ☐ Colour cosmetics	☐ Formaldehyde ☐ Quaternium-15 ☐ DMDM hydantoin ☐ Imidazolidinyl urea ☐ Diazolidinyl urea ☐ Polyoxymethylene urea ☐ Sodium hydroxymethylglycinate ☐ 2-bromo-2-nitropropane-1 ☐ 3-diol (bromopol) ☐ Glyoxal
HOMOSALATE	A potential endocrine disruptor that may impact hormones and may also enhance the absorption of pesticides in the body.	☐ Sunscreen ☐ Skin Care Products with Sun Protection	☐ Homosalate ☐ Homomenthyl salicylate ☐ HMS ☐ HS; 3,3,5-trimethyl-cyclohexyl-salicylate
HYDROQUINONE	Linked to cancer and organ-system toxicity.	☐ Skin lighteners ☐ Cleansers ☐ Face moisturisers ☐ Hair conditioners ☐ Nail coating products	☐ Hydroquinone ☐ Tocopheryl acetate

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METHYLISOTHIAZOLINONE AND METHYLCHLOROISOTHIAZOLINONE	A common preservative found in many liquid personal care products; linked to lung toxicity, allergic reactions and possible neurotoxicity.	☐ Shampoo ☐ Conditioner ☐ Hair colour ☐ Body wash ☐ Lotions ☐ Sunscreen ☐ Cosmetics ☐ Baby products ☐ Hand wash	☐ Methylisothiazolinone (MIT): 2-methyl-4-isothiazoline-3-one ☐ Neolone 950 preservative ☐ MI ☐ OriStar MIT ☐ Microcare MT ☐ Methylchloroisothiazolinone (CMIT): 5-Chloro-2-methyl-4-isothiazolin-3-one and MCI
OCTINOXATE	Can be absorbed rapidly through skin. An endocrine disruptor that mimics estrogen and can disrupt thyroid function.	☐ Hair colour products and shampoos ☐ Sunscreen ☐ Colour cosmetics ☐ Nail polish ☐ Skin creams	☐ Octinoxate ☐ Methoxycinnamate (OMC) ☐ Parsol ☐ Parsol MCX ☐ Parsol MOX ☐ Escalol ☐ 2-ethylhexyl p-methoxycinnamate
PABA	May alter thyroid activity and have additional endocrine disrupting properties.	☐ Sunscreens	☐ PABA ☐ OD-PABA ☐ Padimate O ☐ 4-aminobenzoic acid ☐ Para-aminobenzoic acid ☐ P-aminobenzoic acid ☐ Et-PABA, 2-ethylhexyl ester ☐ P-carboxyaniline
PETROLATUM, PETROLEUM JELLY	Not fully refined petroleum Jelly can be contaminated with toxic chemicals called polycyclic aromatic hydrocarbons (PAHs).	☐ Balms ☐ Creams ☐ Lotions	☐ Petrolatum ☐ Petroleum Jelly ☐ Paraffin Oil ☐ Mineral Oil
PHENOXYETHANOL	Can cause eczema and skin allergic reactions.	☐ All skincare products ☐ All cosmetic products ☐ All personal care products	☐ Phenoxyethanol ☐ 2-Phenoxyethanol ☐ Euxyl K® 400 (mixture of Phenoxyethanol and 1,2-dibromo-2,4-dicyanobutane) ☐ PhE

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PHTHALATES	Linked to endocrine disruption, developmental and reproductive toxicity, and cancer.	☐ Colour cosmetics ☐ Fragranced lotions ☐ Body washes ☐ Hair care products ☐ Nail polish and treatments	☐ Phthalate ☐ DEP ☐ DBP ☐ DEHP
PARABENS	Endocrine-disrupting that can be absorbed through skin, blood and the digestive system.	☐ Shampoos ☐ Conditioners ☐ Lotions ☐ Cleansers ☐ Body wash & scrubs	☐ Ethylparaben ☐ Butylparaben ☐ Methylparaben ☐ Propylparaben ☐ Isobutylparaben ☐ Other ingredients ending in –paraben
RETINOL AND RETINOL COMPOUNDS	Retinol (Vitamin A) can be harmful in certain forms. Two derivatives – retinoic acid and retinyl palmitate – should be avoided in cosmetics and personal care products while retinol itself should not be used at high doses.	☐ Anti-ageing creams and lotions ☐ Moisturisers ☐ Foundation	☐ Retinol (follow up with manufacturer what type) ☐ Vitamin A (follow up with manufacturer what type) ☐ Retinyl acetate ☐ Retinyl palmitate ☐ All-trans retinoic acid ☐ Tretinoin