

Cosmetic ingredients found safe, with qualifications (408 total, through December, 2006)

Ingredient	Qualification
Acetamide MEA	≤ 7.5% for leave-on; safe for use in rinse-off products; but should contain no nitrosamine, free acetamide or nitrosating agents
Acid Orange 3	≤ 0.2% in hair dyes
Acid Violet 43	safe for use in hair dye formulations when free of impurities except for the following: ≤18% volatile matter (at 135°C) and chlorides and sulfates (calculated as sodium salts); ≤0.4% water-insoluble matter; ≤0.2% 1-hydroxy-9,10-anthracenedione; ≤0.2% 1,4-dihydroxy-9,10-anthracenedione; ≤0.1% p-toluidine; ≤0.2% p-toluidine sulfonic acids, sodium salts; ≤1% subsidiary colors; ≤20 ppm lead (as Pb); ≤3 ppm arsenic (as As); ≤1 ppm mercury (as Hg); and ≥80% total color.
Acrylates Copolymer group ¹	safe for use in cosmetics when formulated to avoid irritation
Aloe Barbadosis Flower Extract, Aloe Barbadosis Leaf, Aloe Barbadosis Leaf Extract, Aloe Barbadosis Leaf Juice, Aloe Barbadosis Polysaccharides, and Aloe Barbadosis Leaf Water	safe as cosmetic ingredients in the practices of use and concentrations as described in this safety assessment, if anthraquinone levels in the ingredients do not exceed 50 ppm.
Aluminum Starch Octenylsuccinate	safe as used provided that established limitations on heavy metal concentrations are not exceeded
2-Amino-6-Chloro-4-Nitrophenol and 2-Amino-6-Chloro-4-Nitrophenol HCl	up to 2% in hair dyes
Aminomethyl Propanediol	≤ 1%
Aminomethyl Propanol	≤ 1%
Ammonium Cocoyl Sarcosinate and Ammonium Lauroyl Sarcosinate	safe as used in rinse-off products; but ≤5% for leave-on products, and the data are insufficient to determine safety for use in products where inhalation is likely; should not be used in products where N-nitroso compounds may be formed
Ammonium Lauryl Sulfate	safe for use in rinse-off products; but ≤1% for leave-on
Ammonium Persulfate	safe as used as oxidizing agents in hair colorants and lighteners designed for brief discontinuous use followed by thorough rinsing from the hair and skin.
Ammonium Thioglycolate	≤15.4% as thioglycolic acid; but avoid or minimize skin exposure
Benzalkonium Chloride	≤0.1% free active ingredient
Benzethonium Chloride	≤0.5% skin; ≤0.02% eye area
Benzoic Acid	safe up to 5%, but insufficient to support safety where inhalation is primary route of exposure
Benzyl Alcohol	safe up to 5%, except up to 10% in hair dyes, but insufficient to support safety where inhalation is primary route of exposure
Boric Acid	≤5%; but not safe for use on infant or injured skin
5-Bromo-5-Nitro-1,3-Dioxane	≤0.1%; but should not be used under circumstances where its actions with amines or amides can result in the formation of nitrosamines or nitrosamides
2-Bromo-2-Nitropropane-1,3-Diol	≤0.1%; may contribute to endogenous nitrosamine formation; but should not be used under circumstances where its actions with amines or amides can result in the formation of nitrosamines or nitrosamides
Butoxyethanol	up to 10%
t-Butyl Hydroquinone (aka TBHQ)	≤0.1%
Butyl Methacrylate group ²	safe as used in nail enhancement products when skin contact is avoided; products containing these ingredients should be accompanied with direction to avoid skin contact because of the sensitizing potential of methacrylates
Capsicum Annuum Extract, Fruit Extract, Resin, and Fruit Powder; Capsicum Frutescens Fruit, Fruit Extract, and Resin; and Capsaicin	safe when formulated to avoid irritation
Carvacrol	≤5%
Cetareth-2, -3, -4, -5, -6, -7, -8, -9, -10, -11, -12, -13, -14, -15, -16, -17, -18, -20, -22, -23, -24, -25, -27, -28, -29, -30, -33, -34, -40, -50, -55, -60, -80, and -100	Cetareths should not be used on damaged skin or under conditions where N-nitroso compounds can form.
Cetrimonium Bromide and Cetrimonium Chloride	safe as used in rinse-off products; but < 0.25% in leave-on products

Ingredient	Qualification
Chlorhexidine	≤.14%
Chlorhexidine Diacetate	≤.19%
Chlorhexidine Digluconate	≤.20%
Chlorhexidine Dihydrochloride	≤.16%
p-Chloro-m-Cresol	≤5%
Chlorothymol	≤5%
Cocamide DEA (Amended)	safe as used in rinse-off products; but < 10% in leave-on products; and should not be used in cosmetic products in which N-nitroso compounds are formed
Cocamide MEA	safe as used in rinse-off products and safe at concentrations up to 10% in leave-on products; should not be used as an ingredient in cosmetic products containing N-nitrosating agents, or in product formulations intended to be aerosolized
Cocamidopropyl Betaine	safe as used in rinse-off products, but ≤3% in leave-on products
Cocoyl Sarcosine	safe as used in rinse-off products; but ≤5% for leave-on products, and the data are insufficient to determine safety for use in products where inhalation is likely; should not be used in products where N-nitroso compounds may be formed
Cottonseed Acid, Cottonseed Glycerides, and Cottonseed (Gossypium) Oil	safe as used, provided that established limitations imposed on gossypol, heavy metal and pesticide concentrations are not exceeded (Gossypol limited to a concentration < 450 ppm; heavy metal limitations are lead ≤0.1 mg/kg, arsenic ≤3 ppm (as As), and mercury ≤1 ppm (as Hg); PCB/pesticide contamination limited to not more than 3 ppm with not more 1 ppm for any specific residue)
m-Cresol	≤5%
o-Cresol	≤5%
o-Cymen-5-ol	≤5%
2,4-Diaminophenol and 2,4-Diaminophenol HCl	≤0.2% as the free base
Diazolidinyl Urea	≤0.5%
Diethanolamine	safe as used in rinse-off products; but ≤5% for leave-on products; and should not be used in products containing N-nitrosating agents
Diisopropanolamine	safe for use in cosmetic products; but <u>should not be used</u> in products containing N-nitrosating agents
Diisopropylamine	safe for use in cosmetic products; but <u>should not be used</u> in products containing N-nitrosating agents
Dilauryl Thiodipropionate	≤0.05%
Disperse Blue 1	up to 1%
Ethanolamine	safe for use in rinse-off products; but should not be used in leave-on products
Ethyl Ester of PVM/MA Copolymer and Butyl Ester of PVM/MA Copolymer	safe in neutralized form as cosmetic ingredients in the present practices of use
Ethyl Methacrylate	safe as used in nail products when application is accompanied by directions to avoid skin contact because of the sensitizing potential
Formaldehyde	≤0.2% as free Formaldehyde, but keep to minimum; and should not be used in products intended to be aerosolized
Formic Acid	≤64 ppm of the free acid
Glutaral	< 0.5% for rinse-off; but <u>should not be used</u> in products intended to be aerosolized (insufficient data to support safety in leave-on products)
Glyceryl Dilaurate, Glyceryl Diarachidate, Glyceryl Dibehenate, Glyceryl Dierucate, Glyceryl Dihydroxystearate, Glyceryl Diisopalmitate, Glyceryl Diisostearate, Glyceryl Dilinoleate, Glyceryl Dimyristate, Glyceryl Dioleate, Glyceryl Dipalmitate, Glyceryl Dipalmitoleate, Glyceryl Distearate, Glyceryl Palmitate Lactate, Glyceryl Stearate Citrate, Glyceryl Stearate Lactate, and Glyceryl Stearate Succinate	safe as cosmetic ingredients in the practices of use and concentration as described in the safety assessment, provided that the content of 1,2-diesters is not high enough to induce epidermal hyperplasia
Glyceryl Thioglycolate	≤15.4% as thioglycolic acid; but avoid or minimize skin exposure

Ingredient	Qualification
Glycolic Acid; Ammonium, Calcium, Potassium, and Sodium Glycolate; Methyl, Ethyl, Propyl, and Butyl Glycolate	≤10%, at final formulation pH ≥3.5, when formulated to avoid increasing sun sensitivity or when directions for use include the daily use of sun protection; ≤30%, at final formulation pH≥3.0, in products designed for brief, discontinuous use followed by thorough rinsing from the skin, when applied by trained professionals, and when application is accompanied by directions for the daily use of sun protection.
Glyoxal	≤1.25% in products intended to be applied to the nail
HC Orange No. 1	safe for use in hair dyes up to 3%
HC Red No. 1	≤0.5%
HC Red No. 3	safe as used in hair dyes; but <u>should not be used</u> in products containing N-nitrosating agents
HC Yellow No. 2	≤3%
Hexamidine and Hexamidine Diisethionate	≤0.1%
Hydrogenated Cottonseed Glyceride and Hydrogenated Cottonseed Oil	safe as used, provided that established limitations imposed on gossypol, heavy metal and pesticide concentrations are not exceeded (Gossypol limited to a concentration < 450 ppm; heavy metal limitations are lead ≤ 0.1 mg/kg, arsenic ≤ 3 ppm (as As), and mercury ≤ 1 ppm (as Hg); total PCB/pesticide contamination limited to not more than 3 ppm with not more 1 ppm for any specific residue)
Hydrogenated Lecithin	safe as used in rinse-off products and safe for use in leave-on products at concentrations ≤15%; the data are insufficient to determine safety where this ingredient is likely to be inhaled. This ingredient should not be used in cosmetic products in which N-nitroso compounds may be formed.
Hydroquinone (Amended)	≤1% in aqueous formulations; but only for brief discontinuous use followed by rinsing from skin and hair; and should not be used in any type of leave-on, non-drug cosmetic product
Iodopropynyl Butylcarbamate (aka IPBC)	safe for use at ≤0.1%; should not be used in products intended to be aerosolized
Isopropanolamine	safe for use in cosmetic products; but <u>should not be used</u> in products containing N-nitrosating agents
Isopropyl Cresols	≤5%
Isostearamide DEA and MEA	safe for use in rinse-off products; for leave-on use, OK at conc. that limit release of ethanolamines to 5%, but max. conc. of 40%; should not be used in products in which N-nitroso compounds may be formed
Isostearamidopropyl Morpholine Lactate	safe for use in rinse-off products; data are insufficient to support safety in leave-on formulations
Lactic Acid; Ammonium, Calcium, Potassium, Sodium, and TEA-Lactate; Methyl, Ethyl, Isopropyl, and Butyl Lactate; and Lauryl, Myristyl, and Cetyl Lactate	≤10%, at final formulation pH ≥3.5, when formulated to avoid increasing sun sensitivity or when directions for use include the daily use of sun protection; ≤30%, at final formulation pH ≥3.0, in products designed for brief, discontinuous use followed by thorough rinsing from the skin, when applied by trained professionals, and when application is accompanied by directions for the daily use of sun protection.
Lard Glyceride, Lard Glycerides, Lard, Hydrogenated Lard Glyceride, Hydrogenated Lard Glycerides, and Hydrogenated Lard	safe as used, provided that established limitations on heavy metals and pesticide concentrations are not exceeded (Lead is limited to not more than 0.1 mg/kg (0.1 ppm); arsenic (as As) limited to ≤ 3 ppm and mercury (as Hg) to ≤ 1 ppm. Total PCB/pesticide contamination limited to not more than 40 ppm with not more than 10 ppm for any specific residue)
Lauramide DEA	safe for use in cosmetic products; but <u>should not be used</u> as an ingredient in cosmetic products containing nitrosating agents
Lauramine Oxide	safe for use in rinse-off products; but ≤3.7% for leave-on products
Lauroyl Sarcosine	safe as used in rinse-off products; but ≤5% for leave-on products, and the data are insufficient to determine safety for use in products where inhalation is likely; should not be used in products where N-nitroso compounds may be formed
Lecithin	safe as used in rinse-off products and safe for use in leave-on products at concentrations ≤15%; the data are insufficient to determine safety where this ingredient is likely to be inhaled. This ingredient should not be used in cosmetic products in which N-nitroso compounds may be formed.
Linoleamide DEA	safe as used; but <u>should not be used</u> as an ingredient in cosmetic products containing nitrosating agents
Malic Acid	safe for use as pH adjuster, insufficient for other uses
Methacrylic Acid	safe as used as a nail primer by trained professionals, insufficient data to support the safety for retail use by consumers
Methenamine	≤0.16%; but <u>should not be used</u> in products intended to be aerosolized
Methyl Alcohol	safe as used to denature alcohol used in cosmetic products
Methylbenzethonium Chloride	≤0.5% skin; ≤0.02% eye area

Ingredient	Qualification
Methylchloroisothiazolinone (with Methylisothiazolinone)	rinse-off ≤ 15 ppm; leave-on ≤ 7.5 ppm
Methyldibromo Glutaronitrile	leave-on $\leq 0.025\%$
Methylene Chloride	found safe for brief, discontinuous use only by CIR, but FDA has prohibited the use of Methylene Chloride in cosmetic products, which supercedes the CIR conclusion (21CFR§700.19)
Mixed Isopropanolamines	safe for use in cosmetic products; but <u>should not be used</u> in products containing N-nitrosating agents
Myristamide DEA and MEA	safe for use in rinse-off products; for leave-on use, OK at conc. that limit release of ethanolamines to 5%, but max. conc. of 40%; should not be used in products in which N-nitroso compounds may be formed
Myristoyl Sarcosine	safe as used in rinse-off products; but $\leq 5\%$ for leave-on products, and the data are insufficient to determine safety for use in products where inhalation is likely; should not be used in products where N-nitroso compounds may be formed
Nonoxynol-1, -2, -3, -4, -5, -6, -7, -8	safe as used in rinse-offs; safe at $\leq 5\%$ in leave-ons
Octoxynol-1, -3, -5, -6, -7, -8	safe as used in rinse-offs; safe at $\leq 5\%$ in leave-ons
Oleamide DEA	safe for use in cosmetic products; but should not be used as an ingredient in cosmetic products containing nitrosating agents
Oleoyl Sarcosine	safe as used in rinse-off products; but $\leq 5\%$ for leave-on products, and the data are insufficient to determine safety for use in products where inhalation is likely; should not be used in products where N-nitroso compounds may be formed
Oxyquinoline and Oxyquinoline Sulfate	safe as used as stabilizers for hydrogen peroxide in rinse-off hair care products, but insufficient to support the safety of these ingredients in leave-on products
PCA	should not be used in products containing N-nitrosating agents
PEG-6, -8, -32, -75, -150, -14M, -20M	not for use on damaged skin
PEG-30, -33, -35, -36, -40 Castor Oil	up to 50%
PEG-2, -4, -6, -8, -12, -20, -32, -75, -150 Dilaurate	up to 25%
PEG-7, -30, -40, -78, -80 Glyceryl Cocoate	Safe as used in rinse-off products and safe up to 10% in leave-on products
PEG-30, -40 Hydrogenated Castor Oil	up to 100%
PEG-2, -4, -6, -8, -9, -10, -12, -14, -20, -32, -75, -150, -200 Laurate	up to 25%
PEG-2 Laurate SE	up to 25%
PEG-6, -8, -20 Sorbitan Beeswax	safe for use in the present practices of use, except that cosmetic formulations containing PEG-6, PEG-20, or PEG-75 should not be used on damaged skin
Peppermint (Mentha Piperita) Extract, Peppermint (Mentha Piperita) Leaves, Peppermint (Mentha Piperita) Oil, and Peppermint (Mentha Piperita) Water	safe as used if the concentration of pulegone in this ingredient does not exceed 1%.
Phenethyl Alcohol	$\leq 1\%$
m-Phenylenediamine and m-Phenylenediamine Sulfate	$\leq 10\%$ in hair dyes
N-Phenyl-p-Phenylenediamine, N-Phenyl-p-Phenylenediamine HCl, and N-Phenyl-p-Phenylenediamine Sulfate	$\leq 1.7\%$ as the free base
Polyacrylamide	acrylamide monomer should not exceed 5 ppm in formulation
Polyoxymethylene Urea	concentration of free formaldehyde should be $\leq 0.2\%$; unsafe for aerosols
Polypropylene Glycols (PPG-9, -12, -15, -17, -20, -26, -30, and -34)	$\leq 50\%$
Potassium Bromate	$\leq 10.17\%$ (calculated as Sodium Bromate)
Potassium Persulfate	safe as used as oxidizing agents in hair colorants and lighteners designed for brief discontinuous use followed by thorough rinsing from the hair and skin.

Ingredient	Qualification
Potassium Silicate	safe when formulated to avoid irritation
PPG-2, -4, -5, -9, -12, -14, -15, -16, -17, -18, -20, -22, -24, -26, -30, -33, -40, -52, and -53 Butyl Ether	safe when formulated to avoid irritation
Propylene Glycol	≤50%
Propyl Gallate	≤0.1%
Quaternium-26	should not be used in products in which N-nitroso compounds may be formed
Salicylic Acid group ³	safe as used when formulated to avoid irritation and when formulated to avoid increasing sun sensitivity, or, when increased sun sensitivity would be expected, directions for use include the daily use of sun protection
Shellac	≤6%
Sodium Benzoate	safe up to 5%; but insufficient to support safety where inhalation is primary route of exposure
Sodium Borate	≤5%; but not for use on infant or injured skin
Sodium Bromate	≤10.17%
Sodium p-Chloro-m-Cresol	≤5%
Sodium Cocoyl Isethionate	≤50% rinse-off; ≤17% leave-on
Sodium Cocoyl Sarcosinate, Sodium Lauroyl Sarcosinate, and Sodium Myristoyl Sarcosinate	safe as used in rinse-off products; but ≤5% for leave-on products, and the data are insufficient to determine safety for use in products where inhalation is likely; should not be used in products where N-nitroso compounds may be formed
Sodium C12-14 Olefin Sulfonate Sodium C14-16 Olefin Sulfonate Sodium C14-18 Olefin Sulfonate Sodium C16-18 Olefin Sulfonate	safe as used in rinse off products; safe up to 2% in leave ons; the gamma sultone impurities should not exceed 10 ppm for unsubstituted alkane sultones, 1 ppm for chlorosultones, and 0.1 ppm for unsaturated sultones
Sodium Hexametaphosphate	safe when formulated to avoid skin irritation
Sodium Lauryl Sulfate	safe for use in rinse-off products; but ≤1% for leave-on products
Sodium Malate	safe for use as pH adjuster, insufficient for other uses
Sodium Metaphosphate	safe when formulated to avoid skin irritation
Sodium Metasilicate	safe when formulated to avoid skin irritation
Sodium Naphthalenesulfonate and Polynaphthalenesulfonate	safe as used, except insufficient data to support safety where ingested or contacts mucous membranes
Sodium Octoxynol-2 Ethane Sulfonate, Sodium Octoxynol-2 Sulfate, and Sodium Octoxynol-6 Sulfate	safe as used in rinse-off products; but ≤5% for leave-on products
Sodium PCA	should not be used in cosmetic products containing N-nitrosating agents
Sodium Persulfate	safe as used as oxidizing agents in hair colorants and lighteners designed for brief discontinuous use followed by thorough rinsing from the hair and skin.
Sodium Picramate	not to exceed 0.1%
Sodium Silicate	safe when formulated to avoid skin irritation
Sodium Sulfate	up to 1% in leave-on formulations
Sodium Trimetaphosphate	safe when formulated to avoid skin irritation
Stearamide DEA and MEA	safe for use in rinse-off products; for leave-on use, OK at conc. that limit release of ethanolamines to 5%, but max. conc. of 40%; should not be used in products in which N-nitroso compounds may be formed
Stearamine Oxide	safe for use in rinse-off products; but ≤5% for leave-on products
Stearoyl Sarcosine	safe as used in rinse-off products; but ≤5% for leave-on products, and the data are insufficient to determine safety for use in products where inhalation is likely; should not be used in products where N-nitroso compounds may be formed
Steartrimonium Chloride	up to 0.25% for leave-on products (no rinse-off uses reported)
TBHQ (aka t-Butyl Hydroquinone)	≤0.1%
TEA-Lauryl Sulfate	≤10.5%
TEA-Stearate	safe for use in rinse-off products; but ≤15% in leave-on products; and <u>should not be used</u> with N-nitrosating agents
Thioglycolic Acid	≤15.4%; avoid or minimize skin exposure

Ingredient	Qualification
Thymol	≤5%
Triethanolamine	safe for use in rinse-off products; but ≤5% in leave-on cosmetic products; and should not be used in products containing N-nitrosating agents
Triisopropanolamine	safe for use in cosmetic products; but <u>should not be used</u> in products containing N-nitrosating agents

¹ includes Acrylates Copolymer, Ammonium Acrylates Copolymer, Ammonium VA/Acrylates Copolymer, Sodium Acrylates Copolymer, Ethylene/Acrylic Acid Copolymer, Ethylene/Calcium Acrylate Copolymer, Ethylene/ Magnesium Acrylate Copolymer, Ethylene/Sodium Acrylate Copolymer, Ethylene/Zinc Acrylate Copolymer, Ethylene/Acrylic Acid/VA Copolymer, Acrylates/PVP Copolymer, Acrylates/VA Copolymer, Steareth-10 Allyl Ether/Acrylates Copolymer, Acrylates/Steareth-50 Acrylate Copolymer, Acrylates/Steareth-20 Methacrylate Copolymer, Acrylates/Ammonium Methacrylate Copolymer, Styrene/Acrylates Copolymer, Styrene/ Acrylates/ Ammonium Methacrylate Copolymer, Ammonium Styrene/Acrylates Copolymer, Sodium Styrene/Acrylates Copolymer, Acrylates/Hydroxyesters Acrylates Copolymer, Methacryloyl Ethyl Betaine/Acrylates Copolymer, Lauryl Acrylate/VA. Copolymer, VA/Butyl Maleate/Isobornyl Acrylate Copolymer, Ethylene/Methacrylate Copolymer, Vinyl Caprolactam/PVP/ Dimethylaminoethyl Methacrylate Copolymer, Sodium Acrylates/Acrolein Copolymer, PVP/Dimethylaminoethyl Methacrylate Copolymer, AMP-Acrylates Copolymer, Polyacrylic Acid, Ammonium Polyacrylate, Potassium Aluminum Polyacrylate, Potassium Polyacrylate, Sodium Polyacrylate

² includes Butyl Methacrylate, t-Butyl Methacrylate, Cyclohexyl Methacrylate, Ethoxyethyl Methacrylate, 2-Ethoxy Ethoxy Ethyl Methacrylate, Ethylene Glycol Dimethacrylate, HEMA, Di-HEMA Trimethylhexyl Dicarbamate, Hexyl Methacrylate, Hydroxyethylmethacrylate Acetoacetate, Hydroxypropyl Methacrylate, Isobornyl Methacrylate, Isobutyl Methacrylate, Isopropylidenediphenyl Bisglycidyl Methacrylate, Lauryl Methacrylate, Methoxydiglycol Methacrylate, PEG-4 Dimethacrylate Pyromellitic Glycidyl Dimethacrylate, Tetrahydrofurfuryl Methacrylate, Triethylene Glycol Dimethacrylate, Trimethylolpropane Trimethacrylate, and Urethane Methacrylate

³ includes Salicylic Acid, Calcium Salicylate, Magnesium Salicylate, MEA-Salicylate, Potassium Salicylate, Sodium Salicylate, TEA-Salicylate, Capryloyl Salicylic Acid, C12-15 Alkyl Salicylate, Isocetyl Salicylate, Isodecyl Salicylate, Methyl Salicylate, Myristyl Salicylate, Ethylhexyl Salicylate, Tridecyl Salicylate, Butyloctyl Salicylate and Hexyldodecyl Salicylate