

Quick Reference Table

Key to Review Conclusions: **S** = safe in the present practices of use and concentration as described in the safety assessment;
SQ = safe with qualifications; **I** = insufficient data to support safety; and **U** = unsafe

Ingredient Name	Review Conclusion				Explanation			Journal Citation
	S	SQ	I	U	Maximum "as used" concentration for safe as used conclusion ⁶	Concentration or other limitation on use for safe with qualifications conclusion	Safety concern leading to unsafe conclusion	
A								
Acacia Senegal Gum and Acacia Senegal Gum Extract	X				up to 9% for the gum and 0.001% for the extract			IJT 24(S#):75-118, 2005
Acacia Catechu Gum, Acacia Concinna Fruit Extract, Acacia Dealbata Leaf Extract, Acacia Dealbata Leaf Wax, Acacia Decurrens Extract, Acacia Farnesiana Extract, Acacia Farnesiana Flower Wax, Acacia Farnesiana Gum, and Acacia Senegal Extract			X					IJT 24(S#):75-118, 2005
Acetamide MEA		X				≤ 7.5% for leave-on; safe for use in rinse-off products; but <u>should contain no</u> nitrosamine, free acetamide or nitrosating agents		JACT 12(3):225-36, 1993
Acetylated Lanolin	X				up to 7%			JEPT 4(4):63-92, 1980 confirmed 02/03 IJT 24(S1):2-10, 2005
Acetylated Lanolin Alcohol	X				up to 16%			JEPT 4(4):63-92, 1980 confirmed 02/03 IJT 24(S1):2-10, 2005
Acetyl Tributyl Citrate	X				up to 7%			IJT 21(S2):1-17, 2002
Acetyl Triethyl Citrate	X				up to 7%			IJT 21(S2):1-17, 2002
Acetyl Trihexyl Citrate	X				not in current use ¹			IJT 21(S2):1-17, 2002
Acetyl Trioctyl Citrate	X				not in current use ¹			IJT 21(S2):1-17, 2002
Achillea Millefolium Extract			X					IJT 20(S2):79-84, 2001
Acid Orange 3		X				≤ 0.2% in hair dyes		IJT 19(S1):1-9, 2000

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Acid Violet 43		X				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.		IJT 20(S3):1-6, 2001
Acrylates/Ammonium Methacrylate Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Acrylates Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Acrylates/Hydroxyesters Acrylates Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Acrylates/PVP Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Acrylates/Stearth-20 Methacrylate Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Acrylates/Stearth-50 Acrylate Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Acrylates/VA Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Adipic Acid Dihydrazide			X					JACT 13(3):154-6, 1994
Alcohol Denat. denatured with t-Butyl Alcohol, Denatonium Benzoate, Diethyl Phthalate, or Methyl Alcohol	X				up to 99%			Final Report 09/05 Available from CIR
Alcohol Denat. denatured with Quassin, Brucine, or Brucine Sulfate			X					Final Report 09/05 Available from CIR
Aldioxa			X					JACT 12(3):237-42, 1993

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Aloe Andongensis Extract, Aloe Andongensis Leaf Juice, Aloe Arborescens Leaf Extract, Aloe Arborescens Leaf Juice, Aloe Ferox Leaf Extract, Aloe Ferox Leaf Juice, and Aloe Ferox Leaf Juice Extract			X					Final Report 06/04 Available from CIR
Aloe Barbadensis Flower Extract, Aloe Barbadensis Leaf, Aloe Barbadensis Leaf Extract, Aloe Barbadensis Leaf Juice, Aloe Barbadensis Polysaccharides, and Aloe Barbadensis Leaf Water		X				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.		Final Report 06/04 Available from CIR
Almond Meal	X				up to 27%			JACT 2(5):85-99, 1983 confirmed 11/02 IJT 24(S1):98-101, 2005
Alpha Hydroxy Acids		X				≤ 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.		IJT 17(S1):1-242, 1998
Aluminum Distearate	X				up to 5%			JACT 1(2):143-77, 1982 confirmed 11/01 IJT 22(S1):1-35, 2003
Aluminum Silicate	X				up to 37% in dentifrices; up to 3% in other uses			IJT 22(S1):37-102, 2003
Aluminum Starch Octenylsuccinate		X				safe as used provided that established limitations imposed on heavy metal concentrations are not exceeded		IJT 21(S1):1-7, 2002

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Aluminum Stearate	X				up to 8%			JACT 1(2):143-77, 1982 confirmed 11/01 IJT 22(S1):1-35, 2003
Aluminum Tristearate	X				up to 10%			JACT 1(2):143-77, 1982 confirmed 11/01 IJT 22(S1):1-35, 2003
Amino Bispropyl Dimethicone	X				not in current use ¹			IJT 22(S2):11-35, 2003
5-Amino-4-Chloro-o-Cresol	X				up to 2% in oxidative and non-oxidative hair dyes			IJT 23(S2):1-22, 2004
5-Amino-6-Chloro-o-Cresol	X				up to 2% in oxidative and non-oxidative hair dyes			IJT 23(S2):1-22, 2004
2-Amino-6-Chloro-4-Nitrophenol		X				up to 2% in hair dyes		IJT 16(S1):131-43,1997
2-Amino-6-Chloro-4-Nitrophenol HCl		X				up to 2% in hair dyes		IJT 16(S1):131-43,1997
4-Amino-m-Cresol	X				up to 0.7% in oxidative and non-oxidative hair dyes			IJT 23(S2):1-22, 2004
6-Amino-m-Cresol	X				up to 2.4% in oxidative and non-oxidative hair dyes			IJT 23(S2):1-22, 2004
6-Amino-o-Cresol		X	X			Safe as used in oxidative hair dyes, but the available data are insufficient to support the safety in non-oxidative hair dyes		IJT 23(S2):1-22, 2004
4-Amino-2-Hydroxytoluene	X				up to 2%			JACT 8(4):569-87, 1989 confirmed 04/06
Aminomethyl Propanediol		X				≤ 1%		JACT 9(2):203-28, 1990
Aminomethyl Propanol		X				≤ 1%		JACT 9(2):203-28, 1990
2-Amino-3-Nitrophenol	X				up to 2% in hair dyes			Final Report 08/06 Available from CIR
2-Amino-4-Nitrophenol	X				not reported ²			Final Report 08/06 Available from CIR
2-Amino-5-Nitrophenol	X				not in current use ¹			Final Report 08/06 Available from CIR
2-Amino-4-Nitrophenol Sulfate	X				not in current use ¹			Final Report 08/06 Available from CIR

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4-Amino-2-Nitrophenol			X					Final Report 08/06 Available from CIR
4-Amino-3-Nitrophenol	X				up to 9% in hair dyes			Final Report 08/06 Available from CIR
m-Aminophenol	X				up to 5%			JACT 7(3):279-333, 1988 confirmed 09/05
o-Aminophenol	X				up to 1%			JACT 7(3):279-333, 1988 confirmed 09/05
p-Aminophenol	X				up to 1%			JACT 7(3):279-333, 1988 confirmed 09/05
Aminopropyl Dimethicone	X				not in current use ¹			IJT 22(S2):11-35, 2003
Ammonium Acrylates Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Ammonium Bisulfite	X				up to 32%			IJT 22(S2):63-88, 2003
Ammonium Cocoyl Sarcosinate		X				safe as used in rinse-off products; but ≤5% in leave-on products. Should not be used in products where N-nitroso compounds may be formed. Insufficient data to determine safety in products where these ingredients are likely to be inhaled.		IJT 20(S1):1-14, 2001
Ammonium Glycolate and Ammonium Lactate		X				≤ 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.		IJT 17(S1):1-242, 1998
Ammonium Glycyrrhizate	X				up to 5%			Final Report 06/05 Available from CIR

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Ammonium Laureth Sulfate	X				up to 36%			JACT 2(5):1-34, 1983 confirmed 11/02 IJT 24(S1):85-89, 2005
Ammonium Lauroyl Sarcosinate		X				safe as used in rinse-off products; but ≤5% in leave-on products. Should not be used in products where N-nitroso compounds may be formed. Insufficient data to determine safety in products where these ingredients are likely to be inhaled.		IJT 20(S1):1-14, 2001
Ammonium Lauryl Sulfate		X				safe for use in rinse-off products; but ≤1% for leave-on		JACT 2(7):127-81, 1983 confirmed 06/02 IJT 24(S1):89-98, 2005
Ammonium Persulfate		X				safe as oxidizing agents in hair colorants and lighteners designed for brief, discontinuous use followed by thorough rinsing from hair and skin		IJT 20(S3):7-21, 2001
Ammonium Polyacrylate		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Ammonium Stearate	X				up to 10%			JACT 1(2):143-77, 1982 confirmed 11/01 IJT 22(S1):1-35, 2003
Ammonium Styrene/Acrylates Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Ammonium Sulfite	X				not in current use*			IJT 22(S2):63-88, 2003
Ammonium Thioglycolate		X				≤15.4% as thioglycolic acid; but hairdressers should avoid or minimize consumer skin exposure		JACT 10(1):135-92, 1991
Ammonium VA/Acrylates Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Amodimethicone	X				up to 3%			IJT 22(S2):11-35, 2003
Amodimethicone Hydroxystearate	X				not in current use ¹			IJT 22(S2):11-35, 2003
AMP-Acrylates Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Amyl Acetate	X				up to 10%			JACT 7(6):705-19, 1988

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Arachidonic Acid			X					JACT 12(5):481-559, 1993
Arachidyl Propionate	X				up to 10%			JACT 9(2):143-52, 1990 confirmed 06/06
Arachis Hypogaea (Peanut) Flour			X					IJT 20(S2):65-77, 2001
Arachis Hypogaea (Peanut) Oil	X				up to 25%			IJT 20(S2):65-77, 2001
Arnica Montana Extract and Arnica Montana			X					IJT 20(S2):1-11, 2001
L-Ascorbic Acid	X				up to 10%			IJT 24(2):51-111, 2005
Ascorbyl Dipalmitate	X				not in current use ¹			IJT 18(S3):1-26, 1999
Ascorbyl Palmitate	X				up to 0.2%			IJT 18(S3):1-26, 1999
Ascorbyl Stearate	X				not in current use ¹			IJT 18(S3):1-26, 1999
Astragalus Gummifer Gum	X				up to 3%			JACT 6(1):1-22, 1987 confirmed 09/04
Attapulgate	X				up to 8%			IJT 22(S1):37-102, 2003
Avocado Oil	X				up to 23%			JEPT 4(4):93-103, 1980 confirmed 06/01 IJT 22(S1):1-35, 2003
Azulene			X					IJT 18(S3):27-32, 1999
B								
Basic Blue 99	X				up to 2%			Final Report 3/04 Available from CIR
Beeswax	X				up to 56%			JACT 3(3):1-41, 1984 confirmed 06/03 IJT 24(S1):48-52, 2005
Behenoxy Dimethicone	X				up to 3%			IJT 22(S2):11-35, 2003
Behenyl Alcohol	X				up to 50%			JACT 7(3):359-413, 1988 confirmed 12/05
Bentonite	X				12-80% in mud packs; up to 8% for other uses			IJT 22(S1):37-102, 2003
Benzaldehyde	X				up to 0.5%			IJT 25(S1):11-27
Benzalkonium Chloride		X				≤0.1% free active ingredient		JACT 8(4):589-625, 1989 confirmed 06/06
Benzethonium Chloride		X				≤0.5% skin; ≤0.02% eye area		JACT 4(5):65-106, 1985 confirmed 03/04 IJT 25(S2), 2006

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Benzoic Acid		X	X			safe for use in all cosmetic formulations up to 5%; insufficient data to support safety in products which are inhaled		IJT 20(S3):23-50, 2001
Benzophenone-1	X				up to 2%			JACT 2(5):35-77, 1983 confirmed 09/02 IJT 24(S1):10-18, 2005
Benzophenone-2	X				up to 6%			JACT 2(5):79-84, 1983 confirmed 09/02 IJT 24(S1):10-18, 2005
Benzophenone-3	X				up to 7%			JACT 2(5):35-77, 1983 confirmed 09/02 IJT 24(S1):10-18, 2005
Benzophenone-4	X				up to 2.5%			JACT 2(5):79-84, 1983 confirmed 09/02 IJT 24(S1):10-18, 2005
Benzophenone-5, -6	X				up to 0.3%			JACT 2(5):35-77, 1983 confirmed 09/02 IJT 24(S1):10-18, 2005
Benzophenone-8	X				up to 0.2%			JACT 2(5):79-84, 1983 confirmed 09/02 IJT 24(S1):10-18, 2005
Benzophenone-9	X				up to 0.4%			JACT 2(5):79-84, 1983 confirmed 09/02 IJT 24(S1):10-18, 2005
Benzophenone-11	X				up to 0.2%			JACT 2(5):79-84, 1983 confirmed 09/02 IJT 24(S1):10-18, 2005
Benzoxiquine			X					IJT 16(S1):117-22,1997
Benzyl Alcohol		X	X			safe for use in all cosmetic formulations up to 5%; safe for use in hair dyes up to 10%; insufficient data to support safety in products which are inhaled		IJT 20(S3):23-50, 2001
Benzylparaben	X				up to 0.4% if used alone; parabens mixture up to 0.8%			Amended Final Report 06/06 Available from CIR JACT 5 (5):301-307, 1986 (original report)
BHA	X				up to 0.2%			JACT 3(5):83-146, 1984

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BHT	X				up to 0.5%			IJT 21(S2):19-94, 2002
Biotin	X				up to 1%			IJT 20(S4):1-12, 2001
Bisabolol	X				up to 1%			IJT 18(S3):33-40, 1999
N,N-Bis(2-Hydroxyethyl)-p-Phenylenediamine Sulfate	X				up to 5%			JACT 11(1):129-43, 1992
Boric Acid		X				≤5%; but <u>not safe for use</u> on infant or injured skin		JACT 2(7):87-125, 1983 confirmed 06/03
5-Bromo-5-Nitro-1,3-Dioxane		X				≤0.1%; but <u>should not be used</u> under circumstances where its actions with amines or amides can result in the formation of nitrosamines or nitrosamides		JACT 9(2):279-88, 1990
2-Bromo-2-Nitropropane-1,3-Diol		X				≤0.1%; may contribute to endogenous nitrosamine formation; but <u>should not be used</u> under circumstances where its actions with amines or amides can result in the formation of nitrosamines or nitrosamides		JACT 3(3):139-55, 1984 (Addendum) JEPT 4(4):47-61, 1980 (Original report) confirmed 09/03 IJT 25(S2), 2006
Brucine and Brucine Sulfate			X					Final Report 09/05 Available from CIR
n-Butane (aka Butane)	X				up to 92%			JACT 1(4):127-42, 1982 confirmed 06/02 IJT 24(S1):52-55, 2005
Butoxyethanol		X				up to 10% in hair and nail products		JACT 15(6):462-526, 1996 confirmed 02/02 IJT 24(S1):18-20, 2005
Butyl Acetate	X				> 50%			JACT 8(4):681-705, 1989 confirmed 08/06
n-Butyl Alcohol	X				up to 15% in nail products, up to 0.002% in other products			Amended Final Report 12/05 Available from CIR JACT 6(3):403-25, 1987 (Original Report)
t-Butyl Alcohol (Amended)	X				up to 0.5%			IJT 24(2):1-20, 2005 (Amended) JACT 8(4):627-41, 1989 (Original Report)

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Butylated Hydroxyanisole (now BHA)	X				up to 0.2%			JACT 3(5):83-146, 1984 confirmed 09/03 IJT 25(S2), 2006
Butyl Benzyl Phthalate	X				less than 1%			JACT 11(1):1-23, 1992
Butylene Glycol	X				up to 89%			JACT 4(5):223-48, 1985 confirmed 02/04 IJT 25(S2), 2006
Butyl Ester of PVM/MA Copolymer		X				neutralize free carboxyl group		JACT 12(3):243-56, 1993
Butyl Glycolate and Butyl Lactate		X				≤ 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.		IJT 17(S1):1-242, 1998
t-Butyl Hydroquinone (now TBHQ) (Amended)		X				≤ 0.1%		JACT 10(1):1-7, 1991 (Amended) JACT 5(5):329-51, 1986 (Original report)
Butyl Methacrylate and t-Butyl Methacrylate		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
Butyl Myristate	X				up to 50%			JACT 9(2):247-58, 1990 confirmed 12/06

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Butyloctyl Salicylate		X				safe when formulated to avoid irritation and to avoid increasing sun sensitivity, or when increased sun sensitivity would be expected, directions for use include the daily use of sun protection.		IJT 22(3):1-108
Butylparaben	X				up to 0.4% if used alone; parabens mixture up to 0.8%			Amended Final Report 06/06 Available from CIR JACT 3(5):147-209, 1984 (original report)
Butyl Stearate	X				up to 9%			JACT 4(5):107-46, 1985 confirmed 06/03 IJT 24(S1):21-25, 2005
C								
C30-45 Alkyl Dimethicone	X				2%			IJT 22(S2):11-35, 2003
C24-28 Alkyl Methicone	X				not in current use ¹			IJT 22(S2):11-35, 2003
C30-45 Alkyl Methicone	X				not in current use ¹			IJT 22(S2):11-35, 2003
C12-15 Alkyl Salicylate		X				safe when formulated to avoid irritation and to avoid increasing sun sensitivity, or when increased sun sensitivity would be expected, directions for use include the daily use of sun protection.		IJT 22(3):1-108
Calcium Ascorbate	X				not in current use ¹			IJT 24(2):51-111, 2005
Calcium Disodium EDTA	X				not in current use ¹			IJT 21(S2):95-142, 2002

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Calcium Glycolate and Calcium Lactate		X				≤ 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.		IJT 17(S1):1-242, 1998
Calcium Salicylate		X				safe when formulated to avoid irritation and to avoid increasing sun sensitivity, or when increased sun sensitivity would be expected, directions for use include the daily use of sun protection.		IJT 22(3):1-108
Calcium Silicate	X				up to 10%			IJT 22(S1):37-102, 2003
Calcium Stearate	X				up to 23%			JACT 1(2):143-77, 1982 confirmed 11/01 IJT 22(S1):1-35, 2003
Calendula Officinalis Flower Extract and Calendula Officinalis Flower			X					IJT 20(S2):13-20, 2001
Candelilla (Euphorbia Cerifera) Wax	X				up to 27%			JACT 3(3):1-41, 1984 confirmed 06/03
Caprylic/Capric Triglyceride	X				up to 84%			JEPT 4(4):105-20, 1980 confirmed 06/01 IJT 22(S1):1-35, 2003
Capryloyl Salicylic Acid		X				safe when formulated to avoid irritation and to avoid increasing sun sensitivity, or when increased sun sensitivity would be expected, directions for use include the daily use of sun protection.		IJT 22(S3):1-108, 2003

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Capsicum Annuum Extract, Capsicum Annuum Fruit Extract, Capsicum Annuum Fruit Powder, Capsicum Annuum Resin, Capsicum Frutescens Fruit, Capsicum Frutescens Fruit Extract, Capsicum Frutescens Resin, and Capsaicin		X				safe in the practices of use and concentration described in the safety assessment, when formulated not to be irritating		Final Report 11/03 Available from CIR
Captan			X					JACT 8(4):643-80, 1989
Carbomer-910, -962	X				not in current use ¹			JACT 1(2):109-41, 1982 confirmed 11/02 IJT 22(S1):1-35, 2003
Carbomer-934, -934P, -940, -941	X				up to 2%			JACT 1(2):109-41, 1982 confirmed 11/02 IJT 22(S1):1-35, 2003
Carnauba (Copernicia Cerifera) Wax	X				up to 20%			JACT 3(3):1-41, 1984 confirmed 06/03
Carthamus Tinctorius (Safflower) Seed Oil	X				up to 84%			JACT 4(5):171-97, 1985 confirmed 02/04
Carvacrol		X				up to 0.5%		IJT 25(S1):29-127, 2006
Cellulose Gum	X				up to 20%			JACT 5(3):1-59, 1986 confirmed 12/06
Ceresin	X				up to 20%			JACT 3(3):43-99, 1984 confirmed 06/03 IJT 24(S1):67-74, 2005
Ceteareth-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, -100		X				Ceteareths should not be used on damaged skin or under conditions where N-nitroso compounds can form.		IJT 18(S3):41-49, 1999
Cetearyl Alcohol	X				up to 25%			JACT 7(3):359-413, 1988 confirmed 12/05
Cetearyl Methicone	X				up to 1%			IJT 22(S2):11-35, 2003
Cetearyl Octanoate (aka Cetearyl Ethylhexanoate)	X				up to 25%			JACT 1(4):81-92, 1982 confirmed 06/03 IJT 25(S2), 2006
Ceteth-1, -3, -4, -6, -15, -45	X				not in current use ¹			IJT 18(2):1-8, 1999
Ceteth-2, -16	X				up to 5%			IJT 18(2):1-8, 1999
Ceteth-5, -12, -14, -24, -25, -30	X				up to 2.5%			IJT 18(2):1-8, 1999
Ceteth-10	X				up to 0.15%			IJT 18(2):1-8, 1999
Ceteth-20	X				up to 1%			IJT 18(2):1-8, 1999

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Cetethyl Morpholinium Ethosulfate			X					IJT 20(S3):99-102, 2001
Cetrimonium Bromide		X				safe as used in rinse-off products; but < 0.25% in leave-on products		IJT 16(S3):195-220,1997
Cetrimonium Chloride		X				safe as used in rinse-off products; but < 0.25% in leave-on products		IJT 16(S3):195-220,1997
Cetyl Alcohol	X				up to 50%			JACT 7(3):359-413, 1988 confirmed 12/05
Cetyl Dimethicone	X				up to 10%			IJT 22(S2):11-35, 2003
Cetyl Esters	X				up to 7%			IJT 16(S1):123-30,1997
Cetyl Lactate (Amended)		X				≤ 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.		IJT 17(S1):1-242, 1998 (Amended Report) JACT 1(2):97-107, 1982 (Original Report)
Cetyl Palmitate	X				up to 11%			JACT 1(2):13-35, 1982 confirmed 09/01 IJT 24(S1):28-32, 2005
Cetyl Ricinoleate	X				up to 10%			Final Report 06/05 Available from CIR
Cetyl Stearate	X				up to 15%			JACT 4(5):107-46, 1985 confirmed 06/03 IJT 24(S1):21-25, 2005
Chlorhexidine		X				≤ .14%		JACT 12(3):201-23, 1993 IJT 18(2):69, 1999 (Note)
Chlorhexidine Diacetate		X				≤ .19%		JACT 12(3):201-23, 1993 IJT 18(2):69, 1999 (Note)
Chlorhexidine Digluconate		X				≤ .20%		JACT 12(3):201-23, 1993 IJT 18(2):69, 1999 (Note)

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Chlorhexidine Dihydrochloride		X				≤.16%		JACT 12(3):201-23, 1993 IJT 18(2):69, 1999 (Note)
Chloroacetamide				X			sensitization	JACT 10(1):21-32, 1991
4-Chloro-2-Aminophenol		X	X			Safe use used in oxidative hair dyes, but the available data are insufficient to support the safety in non-oxidative hair dyes		IJT 23(S2):1-22, 2004
p-Chloro-m-Cresol		X				up to 5%		IJT 25(S1):29-127, 2006 (Amended Report) IJT 16(S3):235-68,1997 (Original Report)
Chlorophene			X					IJT 23(S1):1-27 2004
2-Chloro-p-Phenylenediamine	X				up to 0.1%			JACT 11(4):521-530, 1992
2-Chloro-p-Phenylenediamine Sulfate	X				up to 1.0%			JACT 11(4):521-530, 1992
4-Chlororesorcinol	X				≤1% in hair dyes			JACT 15(4): 284-94, 1996
Chlorothymol		X				up to 0.5%		IJT 25(S1):29-127, 2006 (Amended Report)
Chloroxylonol	X				up to 0.5%			JACT 4(5):147-69, 1985 confirmed 02/04 IJT 25(S2), 2006
Cholesterol	X				up to 3%			JACT 5(5):491-516, 1986 confirmed 12/04 IJT 25(S2), 2006
Choleth-24	X				up to 1.3%			JACT 1(4):119-26, 1982 confirmed 06/02 IJT 24(S1):32-34, 2005
Coal Tar			X					Final Report 3/04 Available from CIR
Cocamide DEA (Amended)		X				safe as used in rinse-off products; but < 10% in leave-on products; and <u>should not be used</u> in cosmetic products in which N-nitroso compounds are formed		JACT 15(6):527-42, 1996 (Amended) JACT 5(5):415-54, 1986 (Original report)

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Cocamide MEA		X				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		IJT 18(2):9-16, 1999
Cocamidopropylamine Oxide	X		X		safe for use in rinse-offs (up to 4%); insufficient data for leave-ons			IJT 19(2):1-5, 2000 Amended Final Report 04/06 Available from CIR
Cocamidopropyl Betaine		X				safe as used in rinse-off products; but ≤3% in leave-on products		JACT 10(1):33-52, 1991
Cocoamphoacetate	X				up to 6%			JACT 9(2):121-42, 1990 confirmed 04/06
Cocoamphodiacetate	X				up to 12%			JACT 9(2):121-42, 1990 confirmed 04/06
Cocoamphodipropionate	X				up to 15%			JACT 9(2):121-42, 1990 confirmed 04/06
Cocoamphopropionate	X				up to 10%			JACT 9(2):121-42, 1990 confirmed 04/06
Coconut Acid	X				up to 14%			JACT 5(3):103-21, 1986 confirmed 12/06
Coconut (Cocos Nucifera) Oil (aka Cocos Nicifera (Coconut) Oil)	X				up to 51%			JACT 5(3):103-21, 1986 confirmed 12/06
Cocoyl Sarcosine		X				safe as used in rinse-off products; but ≤5% in leave-on products. Should not be used in products where N-nitroso compounds may be formed. Insufficient data to determine safety in products where these ingredients are likely to be inhaled.		IJT 20(S1):1-14, 2001
Copernicia Cerifera (Carnauba) Wax	X				up to 20%			JACT 3(3):1-41, 1984 confirmed 06/03 IJT 24(S1):48-52, 2005

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Corylus Americana (Hazel) Leaf Extract			X					IJT 20(S1):15-20, 2001
Corylus Americana (Hazel) Seed Extract			X					IJT 20(S1):15-20, 2001
Corylus Americana (Hazel) Seed Oil			X					IJT 20(S1):15-20, 2001
Corylus Avellana (Hazel) Leaf Extract			X					IJT 20(S1):15-20, 2001
Corylus Avellana (Hazel) Seed Extract			X					IJT 20(S1):15-20, 2001
Corylus Avellana (Hazel) Seed Oil			X					IJT 20(S1):15-20, 2001
Corylus Rostrata (Hazel) Leaf Extract			X					IJT 20(S1):15-20, 2001
Corylus Rostrata (Hazel) Seed Extract			X					IJT 20(S1):15-20, 2001
Cottonseed Acid, Cottonseed Glyceride, and Cottonseed (Gossypium) Oil		X				safe as used with the following limits: Gossypol to a concentration < 450 ppm; Lead ≤ 0.1 mg/kg, arsenic ≤ 3 ppm (as As), and mercury ≤ 1 ppm (as Hg); and total PCB/pesticide contamination to not more than 3 ppm with not more 1 ppm for any specific residue.		IJT 20(S2):21-29, 2001
m-Cresol and o-Cresol		X				up to 0.5%		IJT 25(S1):29-127, 2006 (Amended Report)
p-Cresol			X					IJT 25(S1):29-127, 2006 (Amended Report)
Cyclohexyl Methacrylate		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
Cyclomethicone	X				> 50%			JACT 10(1):9-19, 1991
o-Cymen-5-ol (Amended)		X				up to 0.5%		IJT 25(S1):29-127, 2006 (Amended Report) JACT 3(3):131-55, 1984 (Original Report)
D								

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Decyl Oleate	X				up to 88%			JACT 1(2):85-95, 1982 confirmed 11/01 IJT 22(S1):1-35, 2003
Dehydroacetic Acid	X				up to 0.7%			JACT 4(3):123-59, 1985 confirmed 11/03 IJT 25(S2), 2006
Denatonium Benzoate	X				1/16 avoidupois ounce per 100 gal alcohol			Final Report 09/05 Available from CIR
Deoxyglutamyl Fructose			X					IJT 19(S1):11-12, 2000
2,4-Diaminophenol		X				≤0.2% as the free base		JACT 13(5):330-43, 1994
2,4-Diaminophenol HCl (aka 2,4-Diaminophenol Dihydrochloride)		X				≤0.2% as the free base		JACT 13(5):330-43, 1994
2,4-Diaminophenoxyethanol Dihydrochloride	X				up to 5%			JACT 10(1):113-34, 1991
Diammonium EDTA	X				not in current use ¹			IJT 21(S2):95-142, 2002
Diazolidinyl Urea		X				≤0.5%		JACT 9(2):229-45, 1990 confirmed 12/06
Dibutyl Adipate (Amended)	X				up to 8%			IJT 25(S1):129-134, 2006 (Amended Report) JACT 15(4):295-300, 1996 (Original Report)
Di-t-Butylhydroquinone			X					JACT 15(4):311-9, 1996
Dibutyl Phthalate	X				up to 15%			JACT 4(3):267-303, 1985 confirmed 11/02 IJT 24(S1):34-42, 2005 confirmed 09/05
Dicetearyl Dimer Dilinoleate	X				up to 7%			IJT 22(S2):45-61, 2003
Dichlorophene			X					IJT 23(S1):1-27 2004
Diethanolamine		X				safe as used in rinse-off products; but ≤5% for leave-on products; and <u>should not be used</u> in products containing N-nitrosating agents		JACT 2(7):183-235, 1983
Diethylhexyl Adipate	X				up to 38%			JACT 3(3):101-30, 1984 confirmed 06/03 IJT 24(S1):44-47, 2005

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Diethylhexyl Dimer Dilinoleate	X				up to 12%			IJT 22(S2):45-61, 2003
Diethylhexyl Sodium Sulfosuccinate	X				≤5%			IJT (S4):1-20, 1998
Diethyl Phthalate and Dimethyl Phthalate	X				up to 2%			JACT 4(3):267-303, 1985 confirmed 11/02 IJT 24(S1):34-42, 2005 confirmed 09/05
Di-HEMA Trimethylhexyl Dicarbamate		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
Diisopropanolamine		X				safe for use in cosmetic products; but <u>should not be used</u> in products containing N-nitrosating agents		JACT 6(1):53-76, 1987 confirmed 12/04 IJT 25(S2), 2006
Diisopropyl Adipate	X				up to 15%			JACT 3(3):101-30, 1984 confirmed 06/03 IJT 24(S1):44-47, 2005
Diisopropylamine		X				safe for use in cosmetic products; but <u>should not be used</u> in products containing N-nitrosating agents		JACT 14(3):182-92, 1995
Diisopropyl Dimer Dilinoleate	X				up to 53%			IJT 22(S2):45-61, 2003
Diisostearyl Dimer Dilinoleate	X				up to 12%			IJT 22(S2):45-61, 2003
Dilauryl Thiodipropionate		X				≤0.05%		JACT 11(1):25-41, 1992
Dimethicone	X				up to 80% in hair preparations; up to 24% in makeup			IJT 22(S2):11-35, 2003
Dimethicone Copolyol ⁴	X				up to 1%			JACT 1(4):33-54, 1982 confirmed 02/03 IJT 24(S1):42-44, 2005
Dimethicone PEG-7 Phosphate and Dimethicone PEG-8 Benzoate	X				up to 0.5%			JACT 1(4):33-54, 1982 ⁴ confirmed 02/03 IJT 24(S1):42-44, 2005

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Dimethicone PEG-10 Phosphate, Dimethicone PEG-6 Acetate, and Dimethicone PEG-8 Adipate	X				not reported ²			JACT 1(4):33-54, 1982 ⁴ confirmed 02/03 IJT 24(S1):42-44, 2005
Dimethicone PEG/PPG-7/4 Phosphate, Dimethicone PEG/PPG-12/4 Phosphate, Dimethicone PEG/PPG-20/23 Benzoate	X				not reported ²			JACT 1(4):33-54, 1982 ⁴ confirmed 02/03 IJT 24(S1):42-44, 2005
Dimethoxysilyl Ethylenediaminopropyl Dimethicone	X				not in current use ¹			IJT 22(S2):11-35, 2003
Dimethyl Lauramine			X					JACT 14(3):193-95, 1995
Dimethyl Stearamine			X					JACT 14(6):428-32, 1995
Diethyl Adipate	X				up to 38%			JACT 3(3):101-30, 1984 confirmed 06/03 IJT 24(S1):44-47, 2005
Diethyl Dimer Dilinoleate	X				up to 12%			IJT 22(S2):45-61, 2003
Diethyl Doceyl Dimer Dilinoleate	X				up to 10%			IJT 22(S2):45-61, 2003
Diethyl Sodium Sulfosuccinate	X				≤5%			IJT 17(S4):1-20, 1998
Dioleil Tocopheryl Methylsilanol	X				≤6%			IJT 21(S3):51-116, 2002
Dioscorea Villosa (Wild Yam) Root Extract	X				up to 15% of max. 2% plant solids			IJT 23(S2):49-54, 2004
Dipotassium EDTA	X				less than 0.1%			IJT 21(S2):95-142, 2002
Dipotassium Glycyrrhizate	X				up to 1%			Final Report 06/05 Available from CIR
Dipropylene Glycol	X				up to 50%			JACT 4(5):223-48, 1985 confirmed 02/04 IJT 25(S2), 2006
Disodium Cocoamphodiacetate	X				up to 12%			JACT 9(2):121-42, 1990 confirmed 04/06
Disodium Cocoamphodipropionate	X				up to 15%			JACT 9(2):121-142, 1990 confirmed 04/06
Disodium EDTA	X				less than 1%			IJT 21(S2):95-142, 2002
Disodium Glycyrrhizate	X				not in current use ¹			Final Report 06/05 Available from CIR
Disodium Succinoyl Glycyrrhetinate	X				not reported ²			Final Report 06/05 Available from CIR
Disperse Black 9	X				up to 0.5%			JACT 5(3):205-23, 1986 confirmed 12/06
Disperse Blue 1		X				up to 1%		JACT 14(6):433-51, 1995

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Disperse Blue 7			X					Final Report 03/05 Available from CIR
Disperse Violet 1	X				up to 1%			JACT 10(1):103-11, 1991
Disperse Yellow 3			X					JACT 15(4):301-10, 1996
Ditridecyl Dimer Dilinoleate	X				not in current use ¹			IJT 22(S2):45-61, 2003
DMDM Hydantoin	X				up to 1%			JACT 7(3):245-77, 1988 confirmed 09/05
Drometrizole	X				0.07%			JACT 5(5):455-70, 1986 Amended Final Report 04/06 Available from CIR
E								
EDTA	X				up to 2%			IJT 21(S2):95-142, 2002
Elaeis Guineensis (Palm) Kernel Oil	X				up to 25%			Final Report 9/97 Available from CIR
Elaeis Guineensis (Palm) Oil	X				up to 2%			Final Report 9/97 Available from CIR
Emulsifying Wax N.F.	X				up to 21%			JACT 3(3):43-99, 1984 confirmed 06/03 IJT 24(S1):67-74, 2005
Erythorbic Acid	X				up to 1%			IJT 18(S3):1-26, 1999
Ethanolamine		X				safe for use in rinse-off products; but <u>should not be used</u> in leave-on products		JACT 2(7):183-235, 1983
Ethoxydiglycol	X				up to 80%			JACT 4(5):223-48, 1985 confirmed 02/04 IJT 25(S2), 2006
Ethoxyethanol and Ethoxyethanol Acetate				X			reproductive & developmental toxicity	IJT 21(S1):9-62, 2002
Ethoxyethyl Methacrylate and 2-Ethoxy Ethoxy Ethyl Methacrylate		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005

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Ethyl Acetate	X				> 50%			JACT 8(4):681-705, 1989 confirmed 08/06
Ethylene/Acrylic Acid Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Ethylene/Acrylic Acid/VA Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Ethylene/Calcium Acrylate Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Ethylene Glycol Special Report (Reproductive and Developmental Toxicity of Ethylene Glycol and Its Ethers)								IJT 19(2):53-67, 1999
Ethylene Glycol Dimethacrylate		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
Ethylene/Magnesium Acrylate Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Ethylene/Methacrylate Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Ethylene/Sodium Acrylate Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Ethylene/Zinc Acrylate Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Ethyl Ester of PVM/MA Copolymer		X				neutralize free carboxyl groups		JACT 12(3):243-56, 1993

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Ethyl Glycolate and Ethyl Lactate		X				≤ 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.		IJT 17(S1):1-242, 1998
Ethyl Hexanediol	X				≤5%			JACT 13(6):418-36, 1994
Ethylhexyl Palmitate	X				up to 46%			JACT 1(2):13-35, 1982 confirmed 09/01
Ethylhexyl Salicylate		X				safe when formulated to avoid irritation and to avoid increasing sun sensitivity, or when increased sun sensitivity would be expected, directions for use include the daily use of sun protection.		IJT 22(3):1-108
Ethylhexyl Stearate	X				up to 11%			JACT 4(5):107-46, 1985 confirmed 06/03
Ethyl Methacrylate (Amended)		X				safe as used when application is accompanied by directions to avoid skin contact because of the sensitizing potential		IJT 21(S1):63-79, 2002 (Amended) JACT 14(6): 452-67, 1995 (Original Report)
Ethylparaben	X				up to 0.4% if used alone; parabens mixture up to 0.8%			Amended Final Report 06/06 Available from CIR JACT 3(5):147-209, 1984 (original report)
Ethyl Ricinoleate	X				not in current use ¹			Final Report 06/05 Available from CIR

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Euphorbia Cerifera (Candelilla) Wax	X				up to 27%			JACT 3(3):1-41, 1984 confirmed 06/03 IJT 24(S1):48-52, 2005
F								
Formaldehyde		X				≤0.2% as free ¹ Formaldehyde, but keep to minimum; and <u>should not be used</u> in products intended to be aerosolized		JACT 3(3):157-84, 1984 confirmed 09/03 IJT 25(S2), 2006
Formic Acid		X				≤64 ppm of the free acid		IJT 16(S3):221-34, 1997
Fossil and Synthetic Waxes	X				varies			JACT 3(3):43-99, 1984 confirmed 06/03
Fuller's Earth	X				up to 50%			IJT 22(S1):37-102, 2003
G								
Glucose Glutamate			X					IJT 19(S1):11-12, 2000
Glutaral		X				< 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)		JACT 15(2):98-139, 1996
Glyceryl Adipate	X				not in current use ¹			Final Report 5/00 Available from CIR
Glyceryl Alginate and Glyceryl Erucate	X				up to 0.5%			Final Report 5/00 Available from CIR
Glyceryl Arachidate	X				not in current use ¹			Final Report 5/00 Available from CIR
Glyceryl Arachidonate			X					Final Report 5/00 Available from CIR
Glyceryl Behenate	X				up to 5%			Final Report 5/00 Available from CIR
Glyceryl Caprate	X				not in current use ¹			Final Report 5/00 Available from CIR
Glyceryl Caprylate	X				not reported ²			Final Report 5/00 Available from CIR
Glyceryl Caprylate/Caprate	X				up to 2%			Final Report 5/00 Available from CIR

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Glyceryl Citrate/Lactate/ Linoleate/ Oleate	X				not in current use ¹			Final Report 5/00 Available from CIR
Glyceryl Cocoate	X				up to 5%			Final Report 5/00 Available from CIR
Glyceryl Collagenate	X				not in current use ¹			Final Report 5/00 Available from CIR
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 Diricinoleate, Glyceryl Distearate, Glyceryl Palmitate Lactate, Glyceryl Stearate Citrate, Glyceryl Stearate Lactate, and Glyceryl Stearate Succinate		X				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		Amended Final Report 06/05 Available from CIR
Glyceryl Glycyrrhetinate	X				not in current use ¹			Final Report 06/05 Available from CIR
Glyceryl Hydrogenated Rosinate	X				not in current use ¹			Amended Final Report 2/01 Available from CIR
Glyceryl Hydrogenated Soyate	X				not in current use ¹			IJT 23(S2):55-94, 2004
Glyceryl Hydroxystearate	X				up to 2%			IJT 23(S2):55-94, 2004
Glyceryl Isopalmitate	X				not in current use ¹			IJT 23(S2):55-94, 2004
Glyceryl Isostearate	X				up to 6%			IJT 23(S2):55-94, 2004
Glyceryl Isostearates	X				not in current use ¹			IJT 23(S2):55-94, 2004
Glyceryl Isostearate/Myristate	X				not in current use ¹			IJT 23(S2):55-94, 2004
Glyceryl Isotridecanoate/Stearate/ Adipate	X				not in current use ¹			IJT 23(S2):55-94, 2004
Glyceryl Lanolate	X				not in current use ¹			IJT 23(S2):55-94, 2004
Glyceryl Laurate	X				up to 4%			IJT 23(S2):55-94, 2004
Glyceryl Laurate/Oleate, Glyceryl Laurate SE, and Glyceryl Oleate SE	X				not in current use ¹			IJT 23(S2):55-94, 2004
Glyceryl Linoleate and Glyceryl Linolenate	X				up to 1%			IJT 23(S2):55-94, 2004
Glyceryl Montanate	X				not in current use ¹			IJT 23(S2):55-94, 2004
Glyceryl Myristate	X				up to 6%			IJT 23(S2):55-94, 2004
Glyceryl Oleate	X				up to 5%			JACT 5(5):391-413
Glyceryl Oleate/Elaidate	X				up to 2%			IJT 23(S2):55-94, 2004

Ingredient Name	Review Conclusion				Explanation			Journal Citation
	S	SQ	I	U	Maximum "as used" concentration for safe as used conclusion ⁶	Concentration or other limitation on use for safe with qualifications conclusion	Safety concern leading to unsafe conclusion	
Glyceryl Palmitate	X				not reported ²			IJT 23(S2):55-94, 2004
Glyceryl Palmitate/Stearate and Glyceryl Palmitoleate	X				not in current use ¹			IJT 23(S2):55-94, 2004
Glyceryl Pentadecanoate	X				not in current use ¹			IJT 23(S2):55-94, 2004
Glyceryl Polyacrylate	X				up to 2%			IJT 23(S2):55-94, 2004
Glyceryl Ricinoleate	X				up to 12%			JACT 7(6):721-39, 1988 original report Amended Final Report 06/05 Available from CIR
Glyceryl Ricinoleate SE	X				not in current use ¹			Final Report 06/05 Available from CIR
Glyceryl Rosinate	X				up to 7%			IJT 23(S2):55-94, 2004
Glyceryl Sesquioleate	X				not in current use ¹			IJT 23(S2):55-94, 2004
Glyceryl/Sorbitol Oleate/Hydroxystearate	X				not in current use ¹			IJT 23(S2):55-94, 2004
Glyceryl Stearate	X				up to 50%			JACT 1(4):169-92, 1982
Glyceryl Stearate/Acetate	X				up to 7%			IJT 23(S2):55-94, 2004
Glyceryl Stearate Diacetate	X				not in current use ¹			IJT 20(S4):61-94, 2001
Glyceryl Stearate/Maleate	X				not in current use ¹			IJT 23(S2):55-94, 2004
Glyceryl Stearate SE	X				up to 25%			JACT 1(4):169-92, 1982
Glyceryl Tallowate	X				not in current use ¹			IJT 23(S2):55-94, 2004
Glyceryl Thioglycolate		X				≤ 15.4% as thioglycolic acid; but avoid or minimize skin exposure		JACT 10(1):135-92, 1991
Glyceryl Thiopropionate	X				not in current use ¹			IJT 23(S2):55-94, 2004
Glyceryl Triacetyl Hydroxystearate	X				9%			IJT 20(S4):61-94, 2001
Glyceryl Triacetyl Ricinoleate	X				8%			IJT 20(S4):61-94, 2001
Glyceryl Undecylenate	X				not reported ²			IJT 23(S2):55-94, 2004
Glycol Distearate	X				up to 9%			JACT 1(2):1-11, 1982 confirmed 09/01 IJT 22(S1):1-35, 2003

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Glycol HEMA-Methacrylate (aka Ethylene Glycol Dimethacrylate)		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
Glycolic Acid		X				≤ 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.		IJT 17(S1):1-242, 1998
Glycol Ricinoleate	X				not in current use ¹			Final Report 06/05 Available from CIR
Glycol Stearate	X				up to 6%			JACT 1(2):1-11, 1982 confirmed 09/01 IJT 22(S1):1-35, 2003
Glycol Stearate SE	X				up to 12%			JACT 1(2):1-11, 1982 confirmed 09/01 IJT 22(S1):1-35, 2003
Glycyrrhetic Acid	X				up to 2%			Final Report 06/05 Available from CIR
Glycyrrhetinal Stearate	X				not in current use ¹			Final Report 06/05 Available from CIR
Glycyrrhizic Acid	X				up to 0.1%			Final Report 06/05 Available from CIR
Glyoxal (Amended)		X				≤ 1.25% in products intended to be applied to the nail		JACT 14(5):348-63, 1995 IJT 19(1):13-27, 2000

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Gossypium (Cotton) Seed Oil		X				safe as used with the following limits: Gossypol to a concentration < 450 ppm; Lead ≤ 0.1 mg/kg, arsenic ≤ 3 ppm (as As), and mercury ≤ 1 ppm (as Hg); and total PCB/pesticide contamination to not more than 3 ppm with not more 1 ppm for any specific residue.		IJT 20(S2):21-29, 2001
H								
Hazel (Corylus Americana) Extract			X					IJT 20(S1):15-20, 2001
Hazel (Corylus Avellana) Extract			X					IJT 20(S1):15-20, 2001
Hazel (Corylus Rostrata) Extract			X					IJT 20(S1):15-20, 2001
Hazel (Corylus Americana) Nut Extract			X					IJT 20(S1):15-20, 2001
Hazel (Corylus Avellana) Nut Extract			X					IJT 20(S1):15-20, 2001
Hazel (Corylus Rostrata) Nut Extract			X					IJT 20(S1):15-20, 2001
Hazel (Corylus Americana) Nut Oil			X					IJT 20(S1):15-20, 2001
Hazel (Corylus Avellana) Nut Oil			X					IJT 20(S1):15-20, 2001
HC Blue No. 1				X			carcinogenicity	JACT 13(5):344-60, 1994
HC Blue No. 2	X				around 1.7%			JACT 13(5):361-73, 1994
HC Orange No. 1		X				safe for use in hair dyes up to 3%		IJT 17(S4):21-38, 1998
HC Red No. 1		X				≤0.5%		JACT 15(4):320-36, 1996
HC Red No. 3		X				safe as used in hair dyes; but should not be used in products containing N-nitrosating agents		JACT 11(4):509-19, 1992
HC Red No. 7	X				up to 1%			Final Report 06/06 Available from CIR
HC Yellow No. 2		X				≤3%		JACT 13(3):157-66, 1994
HC Yellow No. 4	X				≤3%			IJT 17(S4):39-70, 1998
HC Yellow No. 5	X				up to 1.6%			Final Report 3/04 Available from CIR
Hectorite	X				100% in a skin cleanser; up to 15% in other uses			IJT 22(S1):37-102, 2003
HEDTA	X				not reported ²			IJT 21(S2):95-142, 2002

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HEMA and HEMA Acetoacetate		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
Hexamidine and Hexamidine Diisethionate		X				safe at concentrations less than or equal to 0.1%		Final Report 06/05 Available from CIR
Hexylododecyl Salicylate		X				safe when formulated to avoid irritation and to avoid increasing sun sensitivity, or when increased sun sensitivity would be expected, directions for use include the daily use of sun protection.		IJT 22(3):1-108
Hexylene Glycol	X				up to 6%			JACT 4(5):223-48, 1985 confirmed 02/04 IJT 25(S2), 2006
Hexyl Methacrylate		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
Hexyl Methicone	X				not in current use ¹			IJT 22(S2):11-35, 2003
Human Placental Enzymes, Human Placental Lipids, Human Placental Protein, and Human Umbilical Extract			X			if used, should not deliver any metabolic/endocrine activity, and they must be free of detectable pathogenic viruses or infectious agents		IJT 21(S1):81-91, 2002
Hyaluronic Acid	X				up to 1%			Final Report 12/06 Available from CIR
Hydrogenated Castor Oil	X				up to 39%			Final Report 06/05 Available from CIR
Hydrogenated Coconut Acid	X				up to 10%			JACT 5(3):103-21, 1986 confirmed 12/06

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Hydrogenated Coconut Oil	X				up to 50%			JACT 5(3):103-21, 1986 confirmed 12/06
Hydrogenated Cottonseed Glyceride and Hydrogenated Cottonseed Oil		X				safe as used with the following limits: Gossypol to a concentration < 450 ppm; Lead ≤ 0.1 mg/kg, arsenic ≤ 3 ppm (as As), and mercury ≤ 1 ppm (as Hg); and total PCB/pesticide contamination to not more than 3 ppm with not more 1 ppm for any specific residue.		IJT 20(S2):21-29, 2001
Hydrogenated Lanolin	X				up to 10%			JEPT 4(4):63-92, 1980 confirmed 02/03 IJT 24(S1):2-10, 2005
Hydrogenated Lard, Hydrogenated Lard Glyceride, and Hydrogenated Lard Glycerides		X				lead ≤0.1ppm; arsenic ≤3ppm; mercury ≤1ppm; total PCB/pesticide contamination ≤40ppm with ≤10ppm for any specific residue		IJT 20(S2):57-64, 2001
Hydrogenated Lecithin		X	X			safe as used in rinse-off products; but ≤5% in leave-on products. Should not be used in products where N-nitroso compounds may be formed. Insufficient data to determine safety in products where these ingredients are likely to be inhaled.		IJT 20(S1):21-45, 2001
Hydrogenated Palm Kernel Oil and Hydrogenated Palm Oil	X				up to 2%			IJT 19(S2):7-28, 2000
Hydrogenated Peanut Oil	X				up to 25%			IJT 20(S2):65-77, 2001
Hydrogenated Polyisobutene	X				up to 96%			Final Report 08/06 Available from CIR
Hydrogenated Rice Bran Wax	X				not reported ²			Amended Final Report Available from CIR 09/03
Hydrogenated Tallow Glyceride and Hydrogenated Tallow Glycerides	X				up to 25%			JACT 9(2):153-64, 1990 confirmed 06/06
Hydrolyzed Collagen	X				up to 6%			JACT 4(5)199-221, 1985 confirmed 06/04 IJT 25(S2), 2006

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Hydrolyzed Human Placental Protein and Hydrolyzed Placental Protein			X			if used, should not deliver any metabolic/endocrine activity, and they must be free of detectable pathogenic viruses or infectious agents		IJT 21(S1):81-91, 2002
Hydrolyzed Rice Bran Extract	X				up to 0.0004%	These rice derived ingredients as used in products should not contain significant levels of pesticide residues or heavy metals		Amended Final Report Available from CIR 09/03
Hydrolyzed Rice Bran Protein	X				not in current use ¹	These rice derived ingredients as used in products should not contain significant levels of pesticide residues or heavy metals		Amended Final Report Available from CIR 09/03
Hydrolyzed Rice Extract	X				up to 0.3%	These rice derived ingredients as used in products should not contain significant levels of pesticide residues or heavy metals		Amended Final Report Available from CIR 09/03
Hydrolyzed Rice Protein	X				up to 2%	These rice derived ingredients as used in products should not contain significant levels of pesticide residues or heavy metals		Amended Final Report Available from CIR 09/03
Hydroquinone (Amended)		X				≤ 1% in aqueous formulations; but only for brief discontinuous use followed by rinsing from skin and hair; and <u>should not be used</u> in any type of leave-on, non-drug cosmetic product		JACT 13(3):167-230, 1994 (Amended) JACT 5(3):123-65, 1986 (Original report)
p-Hydroxyanisole				X			skin depigmentation	JACT 4(5):31-63, 1985 confirmed 09/03 IJT 25(S2), 2006
Hydroxybenzomorpholine	X				up to 1%			JACT 10(1):205-13, 1991
Hydroxyethylcellulose	X				up to 5%			JACT 5(3):1-59, 1986 confirmed 12/06

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Hydroxyethylmethacrylate Acetoacetate		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
Hydroxylated Lanolin	X				up to 28%			JEPT 4(4):63-92, 1980 confirmed 02/03 IJT 24(S1):2-10, 2005
4-Hydroxypropylamino-3-Nitrophenol	X				up to 2.6% in hair dyes			Final Report 08/06 Available from CIR
Hydroxypropylcellulose	X				up to 4%			JACT 5(3):1-59, 1986 confirmed 12/06
Hydroxypropyldimethicone	X				not in current use ¹			IJT 22(S2):11-35, 2003
Hydroxypropyl Methacrylate		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
Hydroxypropyl Methylcellulose	X				up to 4%			JACT 5(3):1-59, 1986 confirmed 12/06
Hydroxystearic Acid	X							IJT 18(S1):1-10, 1999
Hypericum Perforatum Extract and Hypericum Perforatum Oil			X					IJT 20(S2):31-39, 2001
I								
Imidazolidinyl Urea	X				up to 1%			JEPT 4(4):133-46, 1980 confirmed 09/01 IJT 22(S1):1-35, 2003
Iodopropynyl Butylcarbamate (IPBC)		X				safe for use at $\leq 0.1\%$; should not be used in products intended to be aerosolized		IJT 17(S5):1-37, 1998
Isoamyl Acetate	X				up to 10%			JACT 7(6):705-19, 1988

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Isobornyl Methacrylate and Isobutyl Methacrylate		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
Isobutane	X				up to 83%			JACT 1(4):127-42, 1982 confirmed 06/02 IJT 24(S1):52-55, 2005
Isobutylparaben	X				up to 0.4% if used alone; parabens mixture up to 0.8%			Amended Final Report 06/06 Available from CIR JACT14(5):364-372, 1995 (original report)
Isobutyl Stearate	X				up to 7%			JACT 4(5):107-46, 1985 confirmed 06/03 IJT 24(S1):21-25, 2005
Isocetyl Salicylate		X				safe when formulated to avoid irritation and to avoid increasing sun sensitivity, or when increased sun sensitivity would be expected, directions for use include the daily use of sun protection.		IJT 22(3):1-108
Isocetyl Stearate	X				up to 30%			JACT 4(5):107-46, 1985 confirmed 06/03 IJT 24(S1):21-25, 2005
Isodecyl Oleate	X				up to 8%			JACT 1(2):85-95, 1982 confirmed 11/01 IJT 22(S1):1-35, 2003
Isodecyl Salicylate		X				safe when formulated to avoid irritation and to avoid increasing sun sensitivity, or when increased sun sensitivity would be expected, directions for use include the daily use of sun protection.		IJT 22(3):1-108

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Isopentane	X				up to 37%			JACT 1(4):127-42, 1982 confirmed 06/02 IJT 24(S1):52-55, 2005
Isopropanolamine		X				safe for use in cosmetic products; but <u>should not be used</u> in products containing N-nitrosating agents		JACT 6(1):53-76, 1987 confirmed 12/04 IJT 25(S2), 2006
Isopropyl Cresols		X				up to 5%		IJT 25(S1):29-127, 2006 (Amended Report)
Isopropylidenediphenyl Bisglycidyl Methacrylate		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
Isopropyl Isostearate	X				up to 50%			JACT 11(1):43-9, 1992
Isopropyl Lactate		X				≤ 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.		IJT 17(S1):1-242, 1998
Isopropyl Lanolate	X				up to 26%			JEPT 4(4):121-32, 1980 confirmed 06/01 IJT 22(S1):1-35, 2003
Isopropyl Linoleate			X					JACT 11(1):51-56, 1992
Isopropyl Myristate	X				up to 78%			JACT 1(4):55-80, 1982 confirmed 06/02 IJT 24(S1):63-67, 2005

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Isopropyl Palmitate	X				up to 44%			JACT 1(2):13-35, 1982 confirmed 09/01 IJT 24(S1):28-32, 2005
Isopropylparaben	X				up to 0.4% if used alone; parabens mixture up to 0.8%			Amended Final Report 06/06 Available from CIR JACT14(5):364-372, 1995 (original report)
Isopropyl Ricinoleate	X							Final Report 06/05 Available from CIR
Isopropyl Stearate	X				up to 87%			JACT 4(5):107-146, 1985 confirmed 06/03 IJT 24(S1):21-25, 2005
Isostearamide DEA and Isostearamide MEA		X				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%; <u>should not be used</u> in products in which N-nitroso compounds may be formed		Final Report 8/95 Available from CIR
Isostearamidopropyl Morpholine Lactate		X				safe for use in rinse-off products; data are insufficient to support safety in leave-on formulations		IJT 18(S3):51-56, 1999
Isostearic Acid	X				up to 26%			JACT 2(7):61-74, 1983 confirmed 09/02 IJT 24(S1):55-56, 2005
Isostearyl Alcohol	X				up to 50%			JACT 7(3):359-413, 1988 confirmed 12/05
Isostearyl Neopentanoate	X				up to 14%			JACT 4(3):1-22, 1985 confirmed 09/03 IJT 25(S2), 2006
J								
Japan Wax	X				up to 34%			JACT 3(3):1-41, 1984 confirmed 06/03
Jojoba Oil	X				up to 25%			JACT 11(1):57-74, 1992
Jojoba Wax	X				not reported ²			JACT 11(1):57-74, 1992

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Juniperus Communis Extract, Juniperus Oxycedrus Extract, Juniperus Oxycedrus Tar, Juniperus Phoenicea Extract, Juniperus Virginiana Extract			X					IJT 20(S2):41-56, 2001
K								
Kaolin	X				up to 100%			IJT 22(S1):37-102, 2003
L								
Lactic Acid		X				≤ 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.		IJT 17(S1):1-242, 1998
Laneth-5	X				up to 2%			JACT 1(4):1-23, 1982 confirmed 02/02 IJT 24(S1):56-59, 2005
Laneth-16	X				up to 3%			JACT 1(4):1-23, 1982 confirmed 02/02 IJT 24(S1):56-59, 2005
Laneth-25, Laneth-9 Acetate, and Laneth-10 Acetate	X				not in current use ¹			JACT 1(4):1-23, 1982 confirmed 02/02 IJT 24(S1):56-59, 2005
Lanolin	X				up to 37%			JEPT 4(4):63-92, 1980 confirmed 02/03 IJT 24(S1):2-10, 2005
Lanolin Acid	X				up to 10%			JEPT 4(4):63-92, 1980 confirmed 02/03 IJT 24(S1):2-10, 2005

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Lanolin Alcohol	X				up to 4%			JEPT 4(4):63-92, 1980 confirmed 02/03 IJT 24(S1):2-10, 2005
Lanolin Oil	X				up to 65%			JEPT 4(4):63-92, 1980 confirmed 02/03 IJT 24(S1):2-10, 2005
Lanolin Wax	X				up to 25%			JEPT 4(4):63-92, 1980 confirmed 02/03 IJT 24(S1):2-10, 2005
Lapyrium Chloride	X				up to 5%			JACT 10(1):87-97, 1991
Lard, Lard Glyceride, and Lard Glycerides		X				lead \leq 0.1ppm; arsenic \leq 3ppm; mercury \leq 1ppm; total PCB/pesticide contamination \leq 40ppm with \leq 10ppm for any specific residue		IJT 20(S2):57-64, 2001
Lauramide DEA		X			up to 50%	safe for use in cosmetic products; but <u>should not be used</u> as an ingredient in cosmetic products containing nitrosating agents		JACT 5(5):415-54, 1986
Lauramine			X					JACT 14(3):196-203, 1995
Lauramine Oxide		X				safe for use in rinse-off products; but \leq 3.7% for leave-on products		JACT 13(3):231-45, 1994
Laureth-4, -23	X				up to 6%			JACT 2(7):1-15, 1983 confirmed 02/03 IJT 24(S1):59-63, 2005
Lauric Acid	X				up to 25%			JACT 6(3):321-401, 1987 confirmed 06/05 IJT 25(S2), 2006
Lauroyl Sarcosine		X				safe as used in rinse-off products; but \leq 5% in leave-on products. Should not be used in products where N-nitroso compounds may be formed. Insufficient data to determine safety in products where these ingredients are likely to be inhaled.		IJT 20(S1):1-14, 2001
Lauryl Acrylate/VA Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002

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Lauryl Lactate		X				≤ 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.		IJT 17(S1):1-242, 1998
Lauryl Methacrylate		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
Lecithin		X	X			safe as used in rinse-off products; but ≤ 15% in leave-on products. Should not be used in products where N-nitroso compounds may be formed. Insufficient data to determine safety in products where these ingredients are likely to be inhaled.		IJT 20(S1):21-45, 2001
Linoleamide DEA		X				safe as used; but <u>should not be used</u> as an ingredient in cosmetic products containing nitrosating agents		JACT 5(5):415-454, 1986
Lithium Magnesium Silicate and Lithium Magnesium Sodium Silicate	X				not in current use ¹			IJT 22(S1):37-102, 2003
Lithium Stearate	X				up to 3%			JACT 1(2):143-177, 1982 confirmed 11/01 IJT 22(S1):1-35, 2003

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M								
Magnesium Aluminum Silicate	X				up to 5%			IJT 22(S1):37-102, 2003
Magnesium Ascorbate	X				not in current use ¹			IJT 24(2):51-111, 2005
Magnesium Ascorbyl Phosphate	X				up to 3%			IJT 24(2):51-111, 2005
Magnesium Salicylate		X				safe when formulated to avoid irritation and to avoid increasing sun sensitivity, or when increased sun sensitivity would be expected, directions for use include the daily use of sun protection.		IJT 22(3):1-108
Magnesium Silicate and Magnesium Trisilicate	X				not in current use ¹			IJT 22(S1):37-102, 2003
Magnesium Stearate	X				up to 8%			JACT 1(2):143-177, 1982 confirmed 11/01 IJT 22(S1):1-35, 2003
Maleic Acid	X				up to 0.0004%	safe for use as a pH adjuster; fragrance use not addressed		Final Report 9/04 Available from CIR
Malic Acid		X				safe for use as pH adjusters; insufficient data to support safety for other uses		IJT 20(S1):47-55, 2001
MEA-Salicylate		X				safe when formulated to avoid irritation and to avoid increasing sun sensitivity, or when increased sun sensitivity would be expected, directions for use include the daily use of sun protection.		IJT 22(3):1-108
Melamine/Formaldehyde Resin			X					JACT 14(5):373-85, 1995
Mentha Piperita (Peppermint) Leaf, Mentha Piperita (Peppermint) Leaf Extract, Mentha Piperita (Peppermint) Leaf Water, and Mentha Piperita (Peppermint) Oil		X				safe as used, except that the concentration of pulegone should not exceed 1%		IJT 20(S3):61-73, 2001
Methacrylic Acid		X				safe as a nail primer in the present practices of use by trained professionals, but insufficient data to support retail use by consumers		IJT 24(S5):33-51, 2005

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Methacryloyl Ethyl Betaine/Acrylates Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Methenamine		X				≤0.16%; but <u>should not be used</u> in products intended to be aerosolized		JACT 11(4):531-58, 1992
Methicone	X				up to 5%			IJT 22(S2):11-35, 2003
Methoxydiglycol Methacrylate		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
Methoxyisopropanol	X				up to 35%	safe in nail care products; fragrance use not addressed		Final Report 09/04 Available from CIR
Methoxyisopropyl Acetate	X				not in current use ¹			Final Report 09/04 Available from CIR
4-Methoxy-m-Phenylenediamine, 4-Methoxy-m-Phenylenediamine HCl, and 4-Methoxy-m-Phenylenediamine Sulfate				X			carcinogenicity	JACT 11(4):381-422, 1992
Methyl Alcohol		X				safe for use as a denaturant		IJT 20(S1):57-85, 2001
3-Methylamino-4-Nitrophenoxyethanol	X				up to 0.15%			Final Report 06/06 Available from CIR
p-Methylaminophenol Sulfate	X				≤1%			JACT 10(1):53-65, 1991
Methylbenzethonium Chloride		X				0.5% skin; 0.02% eye		JACT 4(5):65-106, 1985 confirmed 03/04 IJT 25(S2), 2006
Methylcellulose	X				up to 20%			JACT 5(3)1-59, 1986 confirmed 12/06
Methylchloroisothiazolinone (with Methylisothiazolinone)		X				rinse-off ≤15 ppm; leave-on ≤7.5 ppm		JACT 11(1):75-128, 1992
Methyldibromo Glutaronitrile		X				leave-on ≤0.025%		JACT 15(2):140-65, 1996
Methylene Chloride ⁷		X ⁷				brief, discontinuous use only ⁷		JACT 7(6):741-835, 1988 ⁷

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Methyl Glycolate and Methyl Lactate		X				≤ 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.		IJT 17(S1):1-242, 1998
Methyl Glycyrrhizate	X				not in current use ¹			Final Report 06/05 Available from CIR
2-Methyl-5-Hydroxyethylaminophenol	X				up to 5%			JACT 9(2):185-202, 1990 confirmed 08/06
Methyl Isobutyl Ketone		X				safe as used in nail polish removers and as an alcohol denaturant		IJT 23(S1):29-57, 2003
Methylisothiazolinone (with Methylchloroisothiazolinone)		X				rinse-off ≤15 ppm; leave-on ≤7.5 ppm		JACT 11(1):75-128, 1992
Methylparaben	X				up to 0.4% if used alone; parabens mixture up to 0.8%			Amended Final Report 06/06 Available from CIR JACT 3(5):147-209, 1984 (original report)
2-Methyl Resorcinol	X				up to 2%			JACT 5(3):167-203, 1986 confirmed 12/06
Methyl Ricinoleate	X				not in current use ¹			Final Report 06/05 Available from CIR
Methyl Salicylate		X				safe when formulated to avoid irritation and to avoid increasing sun sensitivity, or when increased sun sensitivity would be expected, directions for use include the daily use of sun protection.		IJT 22(3):1-108

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MIBK		X				safe as used in nail polish removers and as an alcohol denaturant		IJT 23(S1):29-57, 2004
Microcrystalline Wax	X				up to 50%			JACT 3(3):43-99, 1984 confirmed 06/03 IJT 24(S1):67-74, 2005
Mink Oil (Amended)	X				up to 3%			IJT 24(S3):57-64, 2005 IJT 17(S4):71-82, 1998 (Original Report)
Mixed Cresols		X						IJT 25(S1):29-127, 2006 (Amended Report)
Mixed Isopropanolamines		X				safe for use in cosmetic products; but <u>should not be used</u> in products containing N-nitrosating agents		JACT 6(1):53-76, 1987 confirmed 12/04 IJT 25(S2), 2006
Monoethanolamine		X				safe for use in rinse-off products; but <u>should not be used</u> in leave-on products		JACT 2(7):183-235, 1983
Montan Wax	X				up to 11%			JACT 3(3):43-99, 1984 confirmed 06/03 IJT 24(S1):67-74, 2005
Montmorillonite	X				not in current use ¹			IJT 22(S1):37-102, 2003
Morpholine			X					JACT 8(4):707-748, 1989
Myristamide DEA and Myristamide MEA		X				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%; <u>should not be used</u> in products in which N-nitroso compounds may be formed		Final Report 8/95 Available from CIR
Myristic Acid	X				up to 50%			JACT 6(3):321-401, 1987 confirmed 06/05 IJT 25(S2), 2006

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Myristoyl Sarcosine		X				safe as used in rinse-off products; but ≤5% in leave-on products. Should not be used in products where N-nitroso compounds may be formed. Insufficient data to determine safety in products where these ingredients are likely to be inhaled.		IJT 20(S1):1-14, 2001
Myristyl Alcohol	X				up to 5%			JACT 7(3):359-413, 1988 confirmed 12/05
Myristyl Lactate (Amended)		X				≤ 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.		IJT 17(S1):1-242, 1998 (Amended Report) JACT 1(2):97-107, 1982 (Original Report)
Myristyl Myristate	X				up to 20%			JACT 1(4):55-80, 1982 confirmed 06/02 IJT 24(S1):63-67, 2005
Myristyl Salicylate		X				safe when formulated to avoid irritation and to avoid increasing sun sensitivity, or when increased sun sensitivity would be expected, directions for use include the daily use of sun protection.		IJT 22(3):1-108
Myristyl Stearate	X				up to 4%			JACT 4(5):107-46, 1985 confirmed 06/03 IJT 24(S1):21-25, 2005
N								
2,3-Naphthalenediol			X					JACT 7(3):353-57, 1988

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1-Naphthol	X				up to 3% in hair coloring products			JACT 8(4):749-68, 1989 confirmed 12/06
Niacin and Niacinamide	X				Niacin \leq 0.1%; Niacinamide \leq 3%			IJT 24(S5):1-31, 2005
3-Nitro-p-Hydroxyethylaminophenol	X				up to 10% in hair coloring products			Final Report 08/06 Available from CIR
4-Nitro-m-Phenylenediamine			X					JACT 11(4):489-95, 1992
4-Nitro-o-Phenylenediamine and 2-Nitro-p-Phenylenediamine	X				up to 1%			JACT 4(3):161-202, 1985 confirmed 11/03 IJT 25(S2), 2006
Nonoxynol-1, -3, -5, -6, -7		X				safe as used in rinse-offs; safe at \leq 5% in leave-ons		IJT 18(S1):11-31, 1999
Nonoxynol-2, -4, -8 (Amended)		X				safe as used in rinse-offs; safe at \leq 5% in leave-ons		IJT 18(S1):11-31, 1999 JACT 2(7):35-60, 1983 (Original Report)
Nonoxynol-9	X				up to 50%			JACT 2(7):35-60, 1983
Nonoxynol-10, -50	X				up to 25%			JACT 2(7):35-60, 1983
Nonoxynol-12	X				up to 5%			JACT 2(7):35-60, 1983
Nonoxynol-14	X				up to 1%			JACT 2(7):35-60, 1983
Nonoxynol-15, -30	X				\leq 0.1%			JACT 2(7):35-60, 1983
Nonoxynol-40	X				not in current use ¹			JACT 2(7):35-60, 1983
O								
Octoxynol-1		X			up to 30% in permanent waves, lower for other uses	safe as used in rinse-off products; safe at \leq 5% in leave-on products		IJT 23(S1):59-111, 2004
Octoxynol-3 and -5		X			not reported ²	safe as used in rinse-off products; safe at \leq 5% in leave-on products		IJT 23(S1):59-111, 2004
Octoxynol-6, -7, and -8		X			not in current use ¹	safe as used in rinse-off products; safe at \leq 5% in leave-on products		IJT 23(S1):59-111, 2004
Octoxynol-9	X				up to 5%			IJT 23(S1):59-111, 2004
Octoxynol-10	X				up to 25% in hair bleaches			IJT 23(S1):59-111, 2004
Octoxynol-11	X				up to 1%			IJT 23(S1):59-111, 2004

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Octoxynol-13 and -30	X				up to 2%			IJT 23(S1):59-111, 2004
Octoxynol-40	X				up to 0.02%			IJT 23(S1):59-111, 2004
Octoxynol-12, -16, -20, -25, -33, and -70	X				not in current use ¹			IJT 23(S1):59-111, 2004
Octoxynol-9 and -20 Carboxylic Acid	X				not in current use ¹			IJT 23(S1):59-111, 2004
Octyldodecanol	X				up to 85%			JACT 4(5):1-29, 1985 confirmed 03/04 IJT 25(S2), 2006
Octyldodecyl Ricinoleate	X				up to 5%			Final Report 06/05 Available from CIR
Octyldodecyl Stearoyl Stearate	X				up to 15%			IJT 24(S#):65-74, 2005 IJT 20(S3):51-59, 2001 (Original report)
Octyl Palmitate	X				up to 46%			JACT 1(2):13-35, 1982 confirmed 09/01 IJT 24(S1):28-32, 2005
Octyl Stearate	X				up to 11%			JACT 4(5):107-46, 1985 confirmed 06/03 IJT 24(S1):21-25, 2005
Oleamide DEA		X			up to 25%	safe for use in cosmetic products; but should not be used as an ingredient in cosmetic products containing nitrosating agents		JACT 5(5):415-454, 1986
Oleic Acid	X				up to 50%			JACT 6(3):321-401, 1987 confirmed 06/05 IJT 25(S2), 2006
Oleoyl Sarcosine		X				safe as used in rinse-off products; but ≤5% in leave-on products. Should not be used in products where N-nitroso compounds may be formed. Insufficient data to determine safety in products where these ingredients are likely to be inhaled.		IJT 20(S1):1-14, 2001
Oleth-2, -3, -5, -8, -9, -15, -20, -25, -30,	X				up to 12%			IJT 18(S2):17-24, 1999
Oleth-4, -6, -7, -11, -12, -23, -40, -44, -50,	X				not in current use ¹			IJT 18(S2):17-24, 1999

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Oleth-10	X				up to 6%			IJT 18(S2):17-24, 1999
Oleth-16	X				up to 5%			IJT 18(S2):17-24, 1999
Oleyl Alcohol	X				up to 62%			JACT 4(5):1-29, 1985 confirmed 03/04 IJT 25(S2), 2006
Oryza Sativa (Rice) Bran, Oryza Sativa (Rice) Bran Acid, Oryza Sativa (Rice) Bran Wax, Oryza Sativa (Rice) Bran Extract, and Oryza Sativa (Rice) Extract	X				not in current use ¹	These rice derived ingredients as used in products should not contain significant levels of pesticide residues or heavy metals		Amended Final Report Available from CIR 09/03
Oryza Sativa (Rice) Bran Oil	X				up to 39%	These rice derived ingredients as used in products should not contain significant levels of pesticide residues or heavy metals		Amended Final Report Available from CIR 09/03
Oryza Sativa (Rice) Germ Oil	X				up to 0.1%	These rice derived ingredients as used in products should not contain significant levels of pesticide residues or heavy metals		Amended Final Report Available from CIR 09/03
Oryza Sativa (Rice) Germ Powder and Oryza Sativa (Rice) Starch	X				up to 97%	These rice derived ingredients as used in products should not contain significant levels of pesticide residues or heavy metals		Amended Final Report Available from CIR 09/03
Oxyquinoline and Oxyquinoline Sulfate		X	X			Safe for use as stabilizers for hydrogen peroxide in rinse-off hair products; insufficient data for leave-on uses		JACT 11(4):497-507, 1992 Amended Final 6/02 Available from CIR
Ozokerite	X				up to 22%			JACT 3(3):43-99, 1984 confirmed 06/03
P								
Palm (Elaeis Guineensis) Oil	X				up to 2%			IJT 19(S2):7-28, 2000
Palmitic Acid	X				up to 25%			JACT 6(3):321-401, 1987 confirmed 06/05
Palm Kernel (Elaeis Guineensis) Oil	X				up to 25%			IJT 19(S2):7-28, 2000

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Panthenol	X				up to 6%			JACT 6(1):139-62, 1987 confirmed 12/04 IJT 25(S2), 2006
Pantothenic Acid	X				up to 0.01%			JACT 6(1):139-62, 1987 confirmed 12/04 IJT 25(S2), 2006
Paraffin	X				up to 99%			JACT 3(3):43-99, 1984 confirmed 06/03 IJT 24(S1):67-74, 2005
PCA		X				should not be used in products containing N-nitrosating agents		IJT 18(S2):25-34
Peanut Acid and Peanut Glycerides	X				not in current use ¹			IJT 20(S2):65-77, 2001
Peanut (Arachis Hypogaea) Flour			X					IJT 20(S2):65-77, 2001
Peanut (Arachis Hypogaea) Oil	X				up to 25%			IJT 20(S2):65-77, 2001
PEG-4	X				up to 20%			Final Report 02/03 Available from CIR
PEG-6, -8, -32, -75, -150, -14M, -20M		X				not for use on damaged skin		JACT 12(5):429-57, 1993
PEG-30, -33, -35, -36, -40 Castor Oil		X				up to 50%		IJT 16(S3):269-306, 1997
PEG-2, -3, -5, -10, -15, -20 Cocamine			X					IJT 18(S1):11-31, 1999
PEG-2, -4, -6, -8, -12, -20, -32, -75, -150 Dilaurate		X				up to 25%		IJT 19(S2):29-41, 2000
PEG-4 Dimethacrylate		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
PEG-3 Dimethicone, PEG-9 Dimethicone, PEG-14 Dimethicone, and PEG-17 Dimethicone	X				not reported ²			JACT 1(4):33-54, 1982 confirmed 02/03 IJT 24(S1):42-44, 2005
PEG-7 Dimethicone	X				2%			JACT 1(4):33-54, 1982 confirmed 02/03 IJT 24(S1):42-44, 2005

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PEG-8 Dimethicone	X				up to 1%			JACT 1(4):33-54, 1982 confirmed 02/03 IJT 24(S1):42-44, 2005
PEG-10 Dimethicone	X				21%			JACT 1(4):33-54, 1982 confirmed 02/03 IJT 24(S1):42-44, 2005
PEG-12 Dimethicone	X				up to 4%			JACT 1(4):33-54, 1982 confirmed 02/03 IJT 24(S1):42-44, 2005
PEG-2, -3, -4, -6, -8, -12, -20, -32, -50, -150 Distearate	X				up to 5%			IJT 19(S1):51-59, 1999
PEG-9, -75, -120, -175 Distearate	X				not in current use ¹			IJT 19(S1):51-59, 1999
PEG-7, -30, -40, -78, -80 Glyceryl Cocoate		X				Safe as used in rinse-off products and safe up to 10% in leave-on products		IJT 19(S1):51-59, 1999
PEG-30 and -40 Hydrogenated Castor Oil		X				up to 100%		IJT 16(S3):269-306, 1997
PEG-5, -10, -70 Hydrogenated Lanolin	X				not in current use ¹			IJT 18(S1):61-68, 1999
PEG-20, -24, -30 Hydrogenated Lanolin	X				up to 5%			IJT 18(S1):61-68, 1999
PEG-5, -24, -25, -100 Lanolin	X				up to 5%			IJT 18(S1):61-68, 1999
PEG-10, -35, -55, -150 Lanolin	X				not in current use ¹			IJT 18(S1):61-68, 1999
PEG-20, -60, -85 Lanolin	X				up to 10%			JACT 1(4):91-102, 1982
PEG-27, -40, -50 Lanolin	X				up to 5%			JACT 1(4):91-102, 1982
PEG-30 Lanolin	X				up to 1%			JACT 1(4):91-102, 1982
PEG-75 Lanolin	X				up to 25%			JACT 1(4):91-102, 1982
PEG-75 Lanolin Oil	X				up to 5%			IJT 18(S1):61-68, 1999
PEG-75 Lanolin Wax	X				not in current use ¹			IJT 18(S1):61-68, 1999
PEG-2, -4, -6, -8, -9, -10, -12, -14, -20, -32, -75, -150, -200 Laurate and PEG-2 Laurate SE		X				up to 25%		IJT 19(S2):29-41, 2000
PEG/PPG-4/12 Dimethicone and PEG/PPG-14/4 Dimethicone	X				up to 1%			JACT 1(4):33-54, 1982 confirmed 02/03 IJT 24(S1):42-44, 2005
PEG/PPG-17/18 Dimethicone	X				up to 0.2%			JACT 1(4):33-54, 1982 confirmed 02/03 IJT 24(S1):42-44, 2005

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PEG/PPG-18/18 Dimethicone	X				up to 10%			JACT 1(4):33-54, 1982 confirmed 02/03 IJT 24(S1):42-44, 2005
PEG/PPG-20/6 Dimethicone	X				up to 0.3%			JACT 1(4):33-54, 1982 confirmed 02/03 IJT 24(S1):42-44, 2005
PEG/PPG-20/15 Dimethicone	X				up to 0.08%			JACT 1(4):33-54, 1982 confirmed 02/03 IJT 24(S1):42-44, 2005
PEG/PPG-22/23 Dimethicone	X				0.005%			JACT 1(4):33-54, 1982 confirmed 02/03 IJT 24(S1):42-44, 2005
PEG/PPG-3/10 Dimethicone, PEG/PPG-6/11 Dimethicone, PEG/PPG-8/14 Dimethicone, PEG/PPG-15/15 Dimethicone, PEG/PPG-16/2 Dimethicone, PEG/PPG-19/19 Dimethicone, PEG/PPG-20/20 Dimethicone, PEG/PPG-20/23 Dimethicone, PEG/PPG-20/29 Dimethicone, PEG/PPG-22/24 Dimethicone, PEG/PPG-23/6 Dimethicone, PEG/PPG-25/25 Dimethicone, PEG/PPG-27/27 Dimethicone,	X				not reported ²			JACT 1(4):33-54, 1982 confirmed 02/03 IJT 24(S1):42-44, 2005
PEG-10 Propylene Glycol, PEG-75 and -120 Propylene Glycol Stearate	X				not in current use ¹			IJT 20(S4):13-26, 2001
PEG-8 Propylene Glycol Cocoate, PEG-25 Propylene Glycol Stearate	X				1-5%			IJT 20(S4):13-26, 2001
PEG-55 Propylene Glycol Oleate	X				up to 10%			IJT 20(S4):13-26, 2001
PEG-6 Sorbitan Beeswax and PEG-8 Sorbitan Beeswax		X			not in current use ¹	safe for use in the present practices of use, except that cosmetic formulations containing PEG-6, -20, and -75 should not be used on damaged skin		IJT 20(S4):27-38, 2001
PEG-20 Sorbitan Beeswax		X			up to 11%	safe for use in the present practices of use, except that cosmetic formulations containing PEG-6, -20, and -75 should not be used on damaged skin		IJT 20(S4):27-38, 2001

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PEG-20 Sorbitan Cocoate, PEG-40 Sorbitan Diisostearate, PEG-2, and -5 Sorbitan Isostearate, PEG-40 Sorbitan Laurate, PEG-3 and -6 Sorbitan Oleate, PEG-80 Sorbitan Palmitate, PEG-40 Sorbitan Perisostearate, PEG-3, -6, -40, and -60 Sorbitan Stearate, PEG-20 and -30 Sorbitan Tetraoleate PEG-60 Sorbitan Tetrastearate, PEG-20 Sorbitan Triisostearate PEG-18 Sorbitan Trioate	X				not in current use ¹			IJT 19(S2):43-89, 2000
PEG-20 Sorbitan Isostearate	X				1-10%			IJT 19(S2):43-89, 2000
PEG-40 Sorbitan Lanolate	X				0.1-1%			IJT 19(S2):43-89, 2000
PEG-75 Sorbitan Lanolate	X				up to 10%			IJT 19(S2):43-89, 2000
PEG-10 Sorbitan Laurate	X				≤10%			IJT 19(S2):43-89, 2000
PEG-44 and -75 Sorbitan Laurate	X				1-5%			IJT 19(S2):43-89, 2000
PEG-80 Sorbitan Laurate	X				not reported ²			IJT 19(S2):43-89, 2000
PEG-40 Sorbitan Peroleate	X				up to 25%			IJT 19(S2):43-89, 2000
PEG-40 and -60 Sorbitan Tetraoleate and PEG-160 Sorbitan Triisostearate	X				.5-10%			IJT 19(S2):43-89, 2000
PEG-40 and -50 Sorbitol Hexaoleate (aka Sorbeth-40 and -50 Hexaoleate)	X				not reported ²			IJT 19(S2):43-89, 2000
PEG-30 Sorbitol Tetraoleate Laurate (aka Sorbeth Tetraoleate Laurate)	X				not reported ²			IJT 19(S2):43-89, 2000
PEG-60 Sorbitol Tetrastearate (aka Sorbeth Tetrastearate)	X				not reported ²			IJT 19(S2):43-89, 2000
PEG-5, -10, and -25 Soy Sterol	X				up to 2%			IJT 23(S2):23-47, 2004
PEG-16 Soy Sterol	X				up to 0.5%			IJT 23(S2):23-47, 2004
PEG-30 and -40 Soy Sterol	X				not in current use ¹			IJT 23(S2):23-47, 2004
PEG-2 Stearate	X				up to 2%			JACT 2(7):17-60, 1983 confirmed 11/02 IJT 24(S1):74-80, 2005
PEG-8 Stearate	X				up to 3%			JACT 2(7):17-60, 1983 confirmed 11/02 IJT 24(S1):74-80, 2005
PEG-12 Stearate	X				up to 1%			JACT 2(7):17-60, 1983 confirmed 11/02 IJT 24(S1):74-80, 2005

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PEG-20 Stearate	X				up to 4%			JACT 2(7):17-60, 1983 confirmed 11/02 IJT 24(S1):74-80, 2005
PEG-40 Stearate	X				up to 7%			JACT 2(7):17-60, 1983 confirmed 11/02 IJT 24(S1):74-80, 2005
PEG-50 Stearate	X				up to 9%			JACT 2(7):17-60, 1983 confirmed 11/02 IJT 24(S1):74-80, 2005
PEG-100 Stearate	X				up to 25%			JACT 2(7):17-60, 1983 confirmed 11/02 IJT 24(S1):74-80, 2005
PEG-5, -10, -30, -55, -75, -90 Stearate	X				not reported ²			JACT 2(7):17-60, 1983 confirmed 11/02 IJT 24(S1):74-80, 2005
Pentaerythrityl Rosinate (aka Pentaerythritol Rosinate) (Amended)			X					IJT (S4):83-94, 1998 (Amended Report) JACT 13(5):395-9, 1994 (Original Report)
Pentasodium Pentetate	X				up to 3%			Final Report 12/05 Available from CIR
Pentetic Acid	X				up to 0.03%			Final Report 12/05 Available from CIR
Peppermint (Mentha Piperita) Oil (aka Mentha Piperita (Peppermint) Oil), Peppermint (Mentha Piperita) Extract (aka Mentha Piperita (Peppermint) Leaf Extract), Peppermint (Mentha Piperita) Leaves (aka Mentha Piperita (peppermint) Leaf), and Peppermint (Mentha Piperita) Water (aka Mentha Piperita (Peppermint) Leaf Water)		X				safe as used, except that the concentration of pulegone should not exceed 1%		IJT 20(S3):61-73, 2001
Persea Gratissima (Avocado) Oil	X				up to 23%			JEPT 4(4):93-103, 1980 confirmed 06/01 IJT 22(S1):1-35, 2003
Petroleum Distillates (aka Petroleum Distillate)	X				up to 82%			JACT 5(3):225-248, 1986 confirmed 12/06
Phenethyl Alcohol		X				≤1%		JACT 9(2):165-83, 1990 confirmed 08/06

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Phenoxyethanol	X				up to 5%			JACT 9(2):259-77, 1990
m-Phenylenediamine and m-Phenylenediamine Sulfate		X				≤ 10% in hair dyes		IJT 16(S1):59-116,1997
p-Phenylenediamine ³	X				up to 4%			JACT 4(3):203-66, 1985 confirmed 03/04 ³ IJT 25(S2), 2006
Phenyl Methyl Pyrazolone	X				up to 1%			JACT 11(4):475-88, 1992
N-Phenyl-p-Phenylenediamine, N-Phenyl-p-Phenylenediamine HCl, and N-Phenyl-p-Phenylenediamine Sulfate		X				≤ 1.7% as the free base		JACT 13(5):374-94, 1994
Phenyl Trimethicone	X				up to 36%			JACT 5(5):353-71, 1986 confirmed 06/04 IJT 25(S2), 2006
Phloroglucinol			X					JACT 14(6):468-75, 1995
Phytantriol	X				up to 3%			Final Report 12/04 Available from CIR
Placental Enzymes, Placental Lipids, and Placental Protein			X			if used, should not deliver any metabolic/endocrine activity, and they must be free of detectable pathogenic viruses or infectious agents		IJT 21(S1):81-91, 2002
Poloxamer 105	X				up to 3%			Final Report 09/05 Available from CIR
Poloxamer 181 and 182	X				up to 6%			Final Report 09/05 Available from CIR
Poloxamer 184 and 234	X				up to 10%			Final Report 09/05 Available from CIR
Poloxamer 185	X				up to 9%			Final Report 09/05 Available from CIR
Poloxamer 188 and 212	X				up to 2%			Final Report 09/05 Available from CIR
Poloxamer 217, 237, 238, 335, 338, and 401	X				not reported ²			Final Report 09/05 Available from CIR
Poloxamer 333	X				1%			Final Report 09/05 Available from CIR
Poloxamer 334	X				0.3%			Final Report 09/05 Available from CIR
Poloxamer 407	X				up to 20%			Final Report 09/05 Available from CIR

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Poloxamer 101, 108, 122, 123, 124, 183, 215, 231, 235, 282, 284, 288, 331, 402, 403, Poloxamer 105 Benzoate and Poloxamer 182 Benzoate	X				not in current use ¹			Final Report 09/05 Available from CIR
Polyacrylamide (Amended)		X				safe if the level of acrylamide monomer in formulation is not greater than 5ppm		IJT 24(@):21-50, 2005 (Amended) JACT 10(1):193-203, 1991 (Original Report)
Polyacrylic Acid		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Polyamino Sugar Condensate	X				up to 1%			JACT 1(4):25-32, 1982 confirmed 02/02 IJT 24(S1):80-81, 2005
Polybutene	X				up to 92%			JACT 1(4):103-18, 1982 confirmed 06/02 IJT 24(S1):81-82, 2005
Polyethylene	X				0.09 - 24%			Final Report 03/05 Available from CIR
Polyisobutene	X				up to 76%			Final Report 08/06 Available from CIR
Polyoxymethylene Melamine			X					JACT 14(5):373-85, 1995
Polyoxymethylene Urea		X				concentration of free formaldehyde should be $\leq 0.2\%$; unsafe for aerosols		JACT 14(3):204-20, 1995
Polypropylene Glycols		X				$\leq 50\%$		JACT 13(6):437-91, 1994
Polyquaternium-7	X				up to 0.4%			JACT 14(6):476-84, 1995
Polyquaternium-10	X				up to 5%			JACT 7(3): 335-51, 1988 confirmed 09/05
Polyquaternium-11	X				up to 10%			JACT 2(5):161-78, 1983 confirmed 11/02 IJT 24(S1):82-83, 2005
Polysorbate-20, -85	X				> 50%			JACT 3(5):1-82, 1984
Polysorbate-21	X				up to 1%			JACT 3(5):1-82, 1984
Polysorbate-40	X				up to 10%			JACT 3(5):1-82, 1984
Polysorbate-60, -80	X				up to 25%			JACT 3(5):1-82, 1984
Polysorbate-61, -65, -81	X				up to 5%			JACT 3(5):1-82, 1984

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Polyvinyl Acetate (Amended)	X							JACT 15(2):166-76, 1996 (Amended Report) JACT 11(4):465-73, 1992 (Original Report)
Polyvinyl Alcohol	X				up to 10%			IJT 17(S5):67-94, 1998
Potassium Aluminum Polyacrylate		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Potassium Ascorbyl Tocopheryl Phosphate	X				≤0.02%			IJT 21(S3):51-116, 2002
Potassium Bromate		X				≤ 10.17% (calculated as Sodium Bromate)		JACT 13(5):400-14, 1994
Potassium Chlorate			X					JACT 14(3):221-30, 1995
Potassium Cocoyl Hydrolyzed Collagen (formerly Potassium-Coco-Hydrolyzed Animal Protein)	X				up to 20%			JACT 2(7):75-86, 1983 confirmed 11/02 IJT 24(S1):82-85, 2005
Potassium Glycolate and Potassium Lactate		X				≤ 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.		IJT 17(S1):1-242, 1998
Potassium Glycyrrhetinate	X				up to 1%			Final Report 06/05 Available from CIR
Potassium Glycyrrhizinate	X				not in current use ¹			Final Report 06/05 Available from CIR
Potassium Hyaluronate	X				not reported ²			Final Report 12/06 Available from CIR
Potassium Metabisulfite	X				not reported ²			IJT 22(S2):63-88, 2003
Potassium Octoynol-12 Phosphate	X				up to 0.05%			IJT 23(S1):59-111, 2004

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Potassium Persulfate		X				safe as oxidizing agents in hair colorants and lighteners designed for brief, discontinuous use followed by thorough rinsing from hair and skin		IJT 20(S3):7-21, 2001
Potassium Polyacrylate		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Potassium Ricinoleate	X				not in current use ¹			Final Report 06/05 Available from CIR
Potassium Salicylate		X				safe when formulated to avoid irritation and to avoid increasing sun sensitivity, or when increased sun sensitivity would be expected, directions for use include the daily use of sun protection.		IJT 22(3):1-108
Potassium Silicate		X			not reported ²	safe for use when formulated to avoid skin irritation		IJT 24(S1):103-117, 2005
Potassium Sorbate	X				up to 7%			JACT 7(6):837-80, 1988 confirmed 04/06
Potassium Stearate	X				up to 12%			JACT 1(2):143-77, 1982 confirmed 11/01 IJT 22(S1):1-35, 2003
Potassium Sulfite	X				not reported ²			IJT 22(S2):63-88, 2003
PPG-9, -12, -15, -17, -20, -26, -30, and -34		X				≤50%		JACT 13(6):437-91, 1994
PPG-9-Buteth-12	X				not in current use ¹			IJT 19(S1):47-67, 2000
PPG-12-Buteth-16	X				up to 31%			IJT 19(S1):47-67, 2000
PPG-26-Buteth-26	X				2.5%			IJT 19(S1):47-67, 2000
PPG-28-Buteth-35	X				22%			IJT 19(S1):47-67, 2000
PPG-2, -4, -5, -9, -12, -14, -15, -16, -17, -18, -20, -22, -24, -26, -30, -33, -40, -52, and -53 Butyl Ether		X						IJT 20(S4):39-52, 2001
PPG-9, -25, -40 Diethylmonium Chloride			X					IJT 18(S3):57-59, 1999
PPG-5 Lanolin Wax	X				up to 12.1%			IJT 16(S3):307-316, 1997
PPG-5 Lanolin Wax Glyceride	X				up to 18%			IJT 16(S3):307-316, 1997
PPG-11 and -15 Stearyl Ether	X				2-10%			IJT 20(S4):53-59, 2001

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Propane	X				up to 24%			JACT 1(4):127-42, 1982 confirmed 06/02 IJT 24(S1):52-55, 2005
Propylene Carbonate	X				up to 6%			JACT 6(1):23-51, 1987 confirmed 09/04 IJT 25(S2), 2006
Propylene Glycol		X				≤50%		JACT 13(6):437-91, 1994
Propylene Glycol Dicaprate, Propylene Glycol Dicaprylate, Propylene Glycol Dicaprylate/Dicaprate, Propylene Glycol Dicoate, Propylene Glycol Diisostearate, Propylene Glycol Dilaurate, Propylene Glycol Dioleate, Propylene Glycol Dipergonate, Propylene Glycol Isostearate, Propylene Glycol Laurate, Propylene Glycol Myristate, Propylene Glycol Oleate, and Propylene Glycol Oleate SE	X				up to 50%			IJT 18(S2):35-52, 1999
Propylene Glycol Stearate and Propylene Glycol Stearate SE	X				up to 25%			JACT 2(5):101-124, 1983 confirmed 09/02 IJT 24(S1):85-87, 2005
Propyl Gallate		X				≤0.1%		Amended Final Report 09/05 Original JACT 4(3):23-64, 1985
Propyl Glycolate		X				≤ 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.		IJT 17(S1):1-242, 1998

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Propylparaben	X				up to 0.4% if used alone; parabens mixture up to 0.8%			Amended Final Report 06/06 Available from CIR JACT 3(5):147-209, 1984 (original report)
Prunus Amygdalus Dulcis Seed Meal	X				up to 27%			JACT 2(5):85-99, 1983 confirmed 11/02 IJT 24(S1):98-101, 2005
Prunus Amygdalus Dulcis Oil	X				up to 76%			JACT 2(5):85-99, 1983 confirmed 11/02 IJT 24(S1):98-101, 2005
PVP	X				up to 35%			IJT 17 (S4):95-130, 1998
PVP/Dimethylaminoethyl Methacrylate Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
PVP/VA Copolymer	X				> 50%			JACT 2(5):141-59, 1983 confirmed 09/03 IJT 25(S2), 2006
Pyrocatechol (Amended)			X	X			carcinogen; potential co-carcinogen. NOTE: for hair dyes, "insuff. data to support safety."	IJT 16(S1):11-58, 1997 (Amended Report) JACT 5(3):123-65, 1986 (Original Report)
Pyrogallol	X				up to 5%			JACT 10(1):67-85, 1991
Pyromellitic Glycidyl Dimethacrylate		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
Pyrophyllite	X				not in current use ¹			IJT 22(S1):37-102, 2003
Q								
Quaternium-15	X				up to 1%			JACT 5(3):61-101, 1986
Quaternium-18	X				up to 2%			JACT 1(2):71-83, 1982 confirmed 11/01 IJT 22(S1):1-35, 2003

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Quaternium-18 Bentonite	X				up to 9%			JACT 1(2):71-83, 1982 confirmed 11/01 IJT 22(S1):1-35, 2003
Quaternium-18 Hectorite	X				up to 19%			JACT 1(2):71-83, 1982 confirmed 11/01 IJT 22(S1):1-35, 2003
Quaternium-22	X				up to 5%			JACT 14(6):485-97, 1995
Quaternium-26		X				should not be used in products in which N-nitroso compounds may be formed		IJT 19(S1):69-75, 2000
Quassin			X					Final Report 09/05 Available from CIR
R								
Resorcinol	X				up to 5%			JACT 5(3):167-203, 1986 confirmed 12/06
Retinol and Retinyl Palmitate	X				up to 5%			JACT 6(3):279-320, 1987 confirmed 06/05
Rhus Succedanea Fruit Wax	X				up to 34%			JACT 3(3):1-41, 1984 confirmed 06/03 IJT 24(S1):48-52, 2005
Ricinoleic Acid	X				not reported ²			Final Report 06/05 Available from CIR
Ricinus Communis (Castor) Seed Oil	X				up to 81%			Final Report 06/05 Available from CIR
S								
Safflower (Carthamus Tinctorius) Oil	X				up to 84%			JACT 4(5):171-97, 1985 confirmed 02/04 IJT 25(S2), 2006
Salicylic Acid		X				safe when formulated to avoid irritation and to avoid increasing sun sensitivity, or when increased sun sensitivity would be expected, directions for use include the daily use of sun protection.		IJT 22(3):1-108
SD Alcohol 3-A	X				up to 5%			Final Report 09/05 Available from CIR

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SD Alcohol 30	X				not in current use*			Final Report 09/05 Available from CIR
SD Alcohol 39			X					Final Report 09/05 Available from CIR
SD Alcohol 39-B	X				not reported*			Final Report 09/05 Available from CIR
SD Alcohol 39-C	X				up to 88%			Final Report 09/05 Available from CIR
SD Alcohol 40			X					Final Report 09/05 Available from CIR
SD Alcohol 40-B	X				up to 99%			Final Report 09/05 Available from CIR
SD Alcohol 40-C	X				not in current use*			Final Report 09/05 Available from CIR
Sesame (Sesamum Indicum) Oil (aka Sesamum Indicum (Sesame) Oil)	X				> 50%			JACT 12(3):261-77, 1993
Shellac		X				≤6%		JACT 5(5):309-327, 1986 confirmed 12/06
Simmondsia Chinensis (Jojoba) Seed Oil	X				up to 25%			JACT 11(1):57-74, 1992
Simmondsia Chinensis (Jojoba) Wax	X				not reported ²			JACT 11(1):57-74, 1992
Sodium Acrylates/Acrolein Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Sodium Acrylates Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Sodium Alpha-Olefin Sulfonates		X				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		IJT 17(S5):39-66, 1998
Sodium Ascorbate	X				up to 0.3%			IJT 24(2):51-111, 2005
Sodium Ascorbyl Phosphate	X				up to 3%			IJT 24(2):51-111, 2005
Sodium Benzoate		X	X			safe for use in all cosmetic formulations up to 5%; insufficient data to support safety in products which are inhaled		IJT 20(S3):23-50, 2001

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Sodium Bicarbonate	X				> 50%			JACT 6(1):121-138, 1987 confirmed 03/05 IJT 25(S2), 2006
Sodium Bisulfite	X				up to 0.7%			IJT 22(S2):63-88, 2003
Sodium Borate		X				≤5%; but <u>not</u> for use on infant or injured skin		JACT 2(7):87-125, 1983 confirmed 06/03 IJT 25(S2), 2006
Sodium Bromate		X				≤10.17%		JACT 13(5):400-14, 1994
Sodium C12-14 Olefin Sulfonate, Sodium C14-16 Olefin Sulfonate, Sodium C14-18 Olefin Sulfonate, and Sodium C16-18 Olefin Sulfonate		X				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		IJT 17(S5):39-66, 1998
Sodium Carbonate	X				up to 25%			JACT 6(1):121-38, 1987 confirmed 03/05 IJT 25(S2), 2006
Sodium Cetearyl Sulfate	X				up to 25%			JACT 11(1):145-55, 1992
Sodium p-Chloro-m-Cresol		X				up to 0.5%		IJT 25(S1):29-127, 2006 (Amended Report)
Sodium Cocoamphoacetate	X				up to 6%			JACT 9(2):121-142, 1990 reaffirmed 04/06
Sodium Cocoamphopropionate	X				up to 10%			JACT 9(2):121-42, 1990 confirmed 04/06
Sodium Cocoyl Isethionate		X				≤50% rinse-off; ≤17% leave-on		JACT 12(5):459-79, 1993
Sodium Cocoyl Sarcosinate		X				safe as used in rinse-off products; but ≤5% in leave-on products. Should not be used in products where N-nitroso compounds may be formed. Insufficient data to determine safety in products where these ingredients are likely to be inhaled.		IJT 20(S1):1-14, 2001
Sodium Decylbenzenesulfonate	X				not in current use ¹			JACT 12(3):279-309, 1993

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Sodium Dehydroacetate	X				up to 0.6%			JACT 4(3):123-159, 1985 confirmed 11/03 IJT 25(S2), 2006
Sodium Dodecylbenzenesulfonate	X				≤50%			JACT 12(3):279-309, 1993
Sodium Erythorbate	X				up to 1%			IJT 18(S3):1-26, 1999
Sodium Glycolate and Sodium Lactate		X				≤ 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.		IJT 17(S1):1-242, 1998
Sodium Hexametaphosphate		X				safe for use when formulated to avoid skin irritation		IJT 20(S3):75-89, 2001
Sodium Hyaluronate	X				up to 2%			Final Report 12/06 Available from CIR
Sodium Iodate			X					JACT 14(3):231-39, 1995
Sodium Lauraminopropionate			X					IJT 16(S1):1-10,1997
Sodium Laureth Sulfate	X				up to 50%			JACT 2(5):1-34, 1983 confirmed 11/02 IJT 24(S1):85-89, 2005
Sodium Lauriminodipropionate			X					IJT 16(S1):1-10,1997
Sodium Lauroyl Sarcosinate		X				safe as used in rinse-off products; but ≤5% in leave-on products. Should not be used in products where N-nitroso compounds may be formed. Insufficient data to determine safety in products where these ingredients are likely to be inhaled.		IJT 20(S1):1-14, 2001

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Sodium Lauryl Sulfate		X				safe for use in rinse-off products; but ≤1% for leave-on products		JACT 2(7):127-181, 1983 confirmed 06/02 IJT 24(S1):89-98, 2005
Sodium Lauryl Sulfoacetate	X				up to 21%			JACT 6(3):261-277, 1987 confirmed 12/04 IJT 25(S2), 2006
Sodium Magnesium Silicate	X				up to 5%			IJT 22(S1):37-102, 2003
Sodium Malate		X				safe for use as pH adjusters; insufficient data to support safety for other uses		IJT 20(S1):47-55, 2001
Sodium Metabisulfite	X				up to 14%			IJT 22(S2):63-88, 2003
Sodium Metaphosphate		X				safe for use when formulated to avoid skin irritation		IJT 20(S3):75-89, 2001
Sodium Metasilicate		X			up to 14%	safe for use when formulated to avoid skin irritation		IJT 24(S1):103-117, 2005
Sodium Myreth Sulfate	X				> 50%			JACT 11(1):157-63, 1992
Sodium Myristoyl Sarcosinate		X				safe as used in rinse-off products; but ≤5% in leave-on products. Should not be used in products where N-nitroso compounds may be formed. Insufficient data to determine safety in products where these ingredients are likely to be inhaled.		IJT 20(S1):1-14, 2001
Sodium Naphthalenesulfonate		X			below 2%	safe as used in cosmetic formulations intended to be applied to skin; but insufficient data to support the safety in cosmetic products which may contact mucous membranes or be ingested.		Amended Final Report IJT 22(S2):37-44, 2003
Sodium-m-Nitrobenzenesulfonate			X					JACT 15(4):337-47, 1996
Sodium Octoxynol-2 Ethane Sulfonate and Sodium Octoxynol-2 and -6 Sulfate		X			not in current use ¹	safe as used in rinse-off products; safe at ≤5% in leave-on products		IJT 23(S1):59-111, 2004
Sodium Octoxynol-9 Sulfate	X				not in current use ¹			IJT 23(S1):59-111, 2004

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Sodium PCA		X				should not be used in cosmetic products containing N-nitrosating agents		IJT 18(S2):25-34
Sodium Persulfate		X				safe as oxidizing agents in hair colorants and lighteners designed for brief, discontinuous use followed by thorough rinsing from hair and skin		IJT 20(S3):7-21, 2001
Sodium Picramate		X				not to exceed 0.1%		JACT 11(4):447-64, 1992
Sodium Polyacrylate		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Sodium Polynaphthalenesulfonate		X			up to 0.3%	safe as used in cosmetic formulations intended to be applied to skin; but insufficient data to support the safety in cosmetic products which may contact mucous membranes or be ingested.		IJT 22(S2):37-44, 2003 Amended Final Report
Sodium Ricinoleate	X				not reported ²			Final Report 06/05 Available from CIR
Sodium Salicylate		X				safe when formulated to avoid irritation and to avoid increasing sun sensitivity, or when increased sun sensitivity would be expected, directions for use include the daily use of sun protection.		IJT 22(3):1-108
Sodium Sesquicarbonate	X				> 50%			JACT 6(1):121-38, 1987 confirmed 03/05 IJT 25(S2), 2006
Sodium Silicate		X			up to 35%	safe for use when formulated to avoid skin irritation		IJT 24(S1):103-117, 2005
Sodium Stearate	X				up to 25%			JACT 1(2):143-77, 1982 confirmed 11/01 IJT 22(S1):1-35, 2003
Sodium/Styrene/Acrylates Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Sodium Sulfate		X				up to 1% in leave-on formulations		IJT 19(S1):77-87, 2000
Sodium Sulfite	X				up to 3%			IJT 22(S2):63-88, 2003

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Sodium Trimetaphosphate		X				safe for use when formulated to avoid skin irritation		IJT 20(S3):75-89, 2001
Sorbeth-40 and -50 Hexaoleate	X				not reported ²			IJT 19(S2):43-89, 2000
Sorbeth Tetraoleate Laurate	X				not reported ²			IJT 19(S2):43-89, 2000
Sorbeth Tetrastearate	X				not reported ²			IJT 19(S2):43-89, 2000
Sorbic Acid	X				up to 3%			JACT 7(6):837-80, 1988 confirmed 04/06
Sorbitan Caprylate and Sorbitan Sesquiosostearate	X				up to 5%			IJT 21(S1):93-112, 2002
Sorbitan Cooate, Sorbitan Diisostearate, Sorbitan Dioleate, Sorbitan Distearate, Sorbitan Sesquisteate, and Sorbitan Triisostearate	X				not in current use ¹			IJT 21(S1):93-112, 2002
Sorbitan Isostearate	X				up to 4%			IJT 21(S1):93-112, 2002
Sorbitan Laurate, Sorbitan Sesquioleate, and Sorbitan Trioleate	X				up to 10%			JACT 4(3):65-121, 1985
Sorbitan Oleate	X				up to 25%			JACT 4(3):65-121, 1985
Sorbitan Oliviate	X				up to 7.5%			IJT 21(S1):93-112, 2002
Sorbitan Palmitate	X				up to 5%			JACT 4(3):65-121, 1985
Sorbitan Stearate	X				up to 25%			JACT 4(3):65-121, 1985
Sorbitan Tristearate	X				up to 5%			JACT 4(3):65-121, 1985
Squalane	X				up to 31%			JACT 1(2):37-56, 1982 confirmed 09/01 IJT 22(S1):1-35, 2003
Squalene	X				up to 10%			JACT 1(2):37-56, 1982 confirmed 09/01 IJT 22(S1):1-35, 2003
Steapyrium Chloride	X				up to 5%			JACT 10(1):87-97, 1991
Stearalkonium Chloride	X				up to 7%			JACT 1(2):57-69, 1982 confirmed 11/01 IJT 22(S1):1-35, 2003
Stearalkonium Hectorite	X				up to 5%			IJT 19(S2):91-98, 2000

Ingredient Name	Review Conclusion				Explanation			Journal Citation
	S	SQ	I	U	Maximum "as used" concentration for safe as used conclusion ⁶	Concentration or other limitation on use for safe with qualifications conclusion	Safety concern leading to unsafe conclusion	
Stearamide DEA and Stearamide MEA		X				safe for use in rinse-off products; for leave-on use, OK at conc. that limit release of ethanalamines to 5%, but max. conc. of 40%; <u>should not be used</u> in products in which N-nitroso compounds may be formed		Final Report 8/95 Available from CIR
Stearamide DIBA-Stearate			X					IJT 20(S3):91-97, 2001
Stearamidopropyl Dimethicone	X				not in current use ¹			IJT 22(S2):11-35, 2003
Stearamine			X					JACT 14(3):196-203, 1995
Stearamine Oxide		X				safe for use in rinse-off products; but ≤5% for leave-on products		JACT 13(5):231-45, 1994
Steareth-2	X				up to 4%			JACT 7(6):881-910, 1988 confirmed 04/06
Steareth-4	X				up to 2%			JACT 7(6):881-910, 1988 confirmed 04/06
Steareth-6, -15	X				not reported ²			JACT 7(6):881-910, 1988 confirmed 04/06
Steareth-7	X				0.1%			JACT 7(6):881-910, 1988 confirmed 04/06
Steareth-10	X				up to 3%			JACT 7(6):881-910, 1988 confirmed 04/06
Steareth-11, -13	X				not in current use ¹			JACT 7(6):881-910, 1988 confirmed 04/06
Steareth-20	X				up to 15%			JACT 7(6):881-910, 1988 confirmed 04/06
Steareth-10 Allyl Ether/Acrylates Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Stearic Acid	X				> 50%			JACT 6(3):321-401, 1987 confirmed 06/05 IJT 25(S2), 2006
Stearic Hydrazide			X					JACT 10(1):99-101, 1991
Stearoxy Dimethicone	X				up to 3%			IJT 22(S2):11-35, 2003

Ingredient Name	Review Conclusion				Explanation			Journal Citation
	S	SQ	I	U	Maximum "as used" concentration for safe as used conclusion ⁶	Concentration or other limitation on use for safe with qualifications conclusion	Safety concern leading to unsafe conclusion	
Stearyl Sarcosine		X				safe as used in rinse-off products; but ≤5% in leave-on products. Should not be used in products where N-nitroso compounds may be formed. Insufficient data to determine safety in products where these ingredients are likely to be inhaled.		IJT 20(S1):1-14, 2001
Steartrimonium Chloride		X				up to 0.25% for leave-on products (no rinse-off uses reported)		IJT 16(S3):195-220, 1997
Stearyl Alcohol	X				up to 25%			JACT 4(5):1-29, 1985 confirmed 03/04 IJT 25(S2), 2006
Stearyl Dimethicone	X				up to 6%			IJT 22(S2):11-35, 2003
Stearyl Glycyrrhetinate	X				up to 1%			Final Report 06/05 Available from CIR
Stearyl Heptanoate	X				up to 12.5%			JACT 14(6):497-510, 1995
Stearyl Methicone	X				up to 6%			IJT 22(S2):11-35, 2003
Styrene/Acrylates/Ammonium Methacrylate Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Styrene/Acrylates Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Sweet Almond (Prunus Amygdalus Dulcis) Oil	X				up to 76%			JACT 2(5):85-99, 1983 confirmed 11/02 IJT 24(S1):98-101, 2005
Synthetic Beeswax	X				up to 18%			JACT 3(3):43-99, 1984 confirmed 06/03 IJT 24(S1):67-74, 2005
Synthetic Wax	X				up to 29%			JACT 3(3):43-99, 1984 confirmed 06/03 IJT 24(S1):67-74, 2005
T								
Tall Oil Acid	X				up to 8%			JACT 8(4):769-776, 1989 confirmed 12/07
Tallow	X				> 50%			JACT 9(2):153-64, 1990 confirmed 06/06

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	S	SQ	I	U	Maximum "as used" concentration for safe as used conclusion ⁶	Concentration or other limitation on use for safe with qualifications conclusion	Safety concern leading to unsafe conclusion	
Tallow Glyceride and Tallow Glycerides	X				up to 25%			JACT 9(2):153-64, 1990 confirmed 06/06
TBHQ (Amended)		X				≤0.1%		JACT 10(1):1-7, 1991 (Amended) JACT 5(5):329-51, 1986 (Original report)
TEA-Cocoyl-Hydrolyzed Collagen (formerly Triethanolamine-Coco-Hydrolyzed Animal Protein)	X				up to 50%			JACT 2(7):75-86, 1983 confirmed 11/02 IJT 24(S1):82-85, 2005
TEA-Dodecylbenzenesulfonate	X				≤50%			JACT 12(3):279-309, 1993
TEA-EDTA	X				not in current use ¹			IJT 21(S2):95-142, 2002
TEA-Lactate		X				≤ 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.		IJT 17(S1):1-242, 1998
TEA-Lauryl Sulfate		X				≤10.5%		JACT 1(4):143-67, 1982
TEA-Salicylate		X				safe when formulated to avoid irritation and to avoid increasing sun sensitivity, or when increased sun sensitivity would be expected, directions for use include the daily use of sun protection.		IJT 22(3):1-108
TEA Stearate		X				safe for use in rinse-off products; but ≤15% in leave-on products; and <u>should not be used</u> with N-nitrosating agents		JACT 14(3): 240-8, 1995

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Tetrahydrofurfuryl Methacrylate		X				safe in nail enhancement products when skin contact is avoided; products should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
Tetrasodium EDTA	X				less than 1%			IJT 21(S2):95-142, 2002
Thioglycolic Acid		X				≤ 15.4%; <u>avoid or minimize</u> skin exposure		JACT 10(1):135-92, 1991
Thymol		X				up to 0.5%		IJT 25(S1):29-127, 2006 (Amended Report)
Tocopherol	X				≤5%			IJT 21(S3):51-116, 2002
Tocophersolan	X				≤0.2%			IJT 21(S3):51-116, 2002
Tocopheryl Acetate	X				≤36% (100% in Vitamin E oil)			IJT 21(S3):51-116, 2002
Tocopheryl Linoleate	X				≤2%			IJT 21(S3):51-116, 2002
Tocopheryl Linoleate/Oleate	X				not in current use ¹			IJT 21(S3):51-116, 2002
Tocopheryl Nicotinate	X				≤1%			IJT 21(S3):51-116, 2002
Tocopheryl Succinate	X				not reported ²			IJT 21(S3):51-116, 2002
Toluene	X				up to 50% in nail care products			JACT 6(1):77-120, 1987 confirmed 03/05 IJT 25(S2), 2006
Toluene-2,5-Diamine	X				up to 1%			JACT 11(4):423-45, 1992
Toluene-3,4-Diamine	X				not in current use ¹			JACT 11(4):423-45, 1992
Toluene-2,5-Diamine Sulfate	X				up to 5%			JACT 11(4):423-45, 1992
Toluenesulfonamide/Formaldehyde Resin (aka Tosylamide/Formaldehyde Resin)	X				up to 13%			JACT 5(5):471-490, 1986 confirmed 09/04 IJT 25(S2), 2006
Toluenesulfonamide/Formaldehyde Resin-80	X				not in current use ¹			JACT 5(5):471-490, 1986 confirmed 09/04 IJT 25(S2), 2006
Tragacanth (Astragalus Gummifer) Gum	X				up to 3%			JACT 6(1):1-22, 1987 confirmed 09/04 IJT 25(S2), 2006
Triacetin	X				up to 4%			IJT 22(S2):1-10, 2003

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	S	S Q	I	U	Maximum "as used" concentration for safe as used conclusion ⁶	Concentration or other limitation on use for safe with qualifications conclusion	Safety concern leading to unsafe conclusion	
Triarachidin, Tricaprin, Trierucin, Triheptanoin, Triheptylundecanoin, Triisopalmitin, Triolein, Tripalmitolein, Tricinolein, and Triundecanoin	X				not in current use ¹			IJT 20(S4):61-94, 2001
Tribehenin	X				up to 6%			IJT 20(S4):61-94, 2001
Tricaprylin, Triethylhexanoin (aka Trioctanoin) Triisononanoin, Trilinolein, Trimyristin, Tripalmitin, and Tristearin	X				not reported ²			IJT 20(S4):61-94, 2001
Trichloroethane	X				not in current use ¹			Final Report 04/06 Available from CIR
Tridecyl Salicylate		X				safe when formulated to avoid irritation and to avoid increasing sun sensitivity, or when increased sun sensitivity would be expected, directions for use include the daily use of sun protection.		IJT 22(3):1-108
Triethanolamine		X				safe for use in rinse-off products; but ≤5% in leave-on cosmetic products; and should <u>not be used</u> in products containing N-nitrosating agents		JACT 2(7):183-235, 1983
Triethanolamine Cocoyl Hydrolyzed Collagen (formerly Triethanolamine-Coco-Hydrolyzed Animal Protein)	X				up to 50%			JACT 2(7):75-86, 1983 confirmed 11/02 IJT 24(S1):82-85, 2005
Triethylene Glycol	X				up to 0.08%			Final Report 02/03 Available from CIR
Triethylene Glycol Dimethacrylate		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
Trihydroxystearin	X				up to 5%			IJT 19(S1):89-94, 2000

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Triisopropanolamine		X				safe for use in cosmetic products; but <u>should not be used</u> in products containing N-nitrosating agents		JACT 6(1):53-76, 1987 confirmed 12/04 IJT 25(S2), 2006
Triisostearin	X				<40%			IJT 20(S4):61-94, 2001
Trilaurin	X				<50%			IJT 20(S4):61-94, 2001
Trimethylolpropane Trimethacrylate		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
Tripotassium EDTA	X				not reported ²			IJT 21(S2):95-142, 2002
Trisodium EDTA and Trisodium HEDTA	X				less than 1%			IJT 21(S2):95-142, 2002
Trisodium Glycyrrhizate	X				not in current use ¹			Final Report 06/05 Available from CIR
Triticum Vulgare (Wheat) Germ Oil	X				up to 18%			JEPT 4(4):33-45, 1980 confirmed 06/01 IJT 22(S1):1-35, 2003
Triticum Vulgare (Wheat) Gluten	X				≤1%			JEPT 4(4):5-17, 1980 confirmed 06/01 IJT 22(S1):1-35, 2003
Triticum Vulgare (Wheat) Kernel Flour	X				up to 1%			JEPT 4(4):19-32, 1980 confirmed 06/01 IJT 22(S1):1-35, 2003
Triticum Vulgare (Wheat) Starch	X				up to 25%			JEPT 4(4):19-32, 1980 confirmed 06/01 IJT 22(S1):1-35, 2003
U								
Umbilical Extract			X			if used, should not deliver any metabolic/endocrine activity, and they must be free of detectable pathogenic viruses or infectious agents		IJT 21(S1):81-91, 2002
Urea	X				up to 10%			IJT 24(S3):1-56, 2005

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Urethane Methacrylate		X				safe in nail enhancement products when skin contact is avoided; products containing this ingredient should be accompanied with directions to avoid skin contact because of the sensitizing potential of methacrylates		IJT 24(S5):53-100, 2005
Urocanic Acid			X					JACT 14(5):386-423, 1995
V								
VA/Butyl Maleate/Isobornyl Acrylate Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
VA/Crotonates Copolymer (formerly Vinyl Acetate/Crotonic Acid Copolymer)	X				up to 11%			JACT 2(5):125-140, 1983 confirmed 06/03 IJT 24(S1):101-102, 2005
Vinyl Caprolactam/PVP/Dimethylaminoethyl Methacrylate Copolymer		X				safe for use when formulated to avoid irritation		IJT 21(S3):1-50, 2002
Vinyl Dimethicone	X				not in current use ¹			IJT 22(S2):11-35, 2003
VP/VA Copolymer	X				> 50%			JACT 2(5):141-59, 1983 confirmed 09/03
W								
Wheat (Triticum Vulgare) Flour (aka Triticum Vulgare (Wheat) Kernel Flour)	X				up to 1%			JEPT 4(4):19-32, 1980 confirmed 06/01 IJT 22(S1):1-35, 2003
Wheat Germ Glycerides	X				up to 25%			JEPT 4(4):5-17, 1980 confirmed 06/01 IJT 22(S1):1-35, 2003
Wheat Germ Oil	X				up to 18%			JEPT 4(4):33-45, 1980 confirmed 06/01 IJT 22(S1):1-35, 2003
Wheat Gluten	X				≤1%			JEPT 4(4):5-17, 1980 confirmed 06/01 IJT 22(S1):1-35, 2003
Wheat Starch	X				up to 25%			JEPT 4(4):19-32, 1980 confirmed 06/01 IJT 22(S1):1-35, 2003

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Wild Yam (Dioscorea Villosa) Extract	X				up to 15% of max 2% plant solids			IJT 23(S2):49-54, 2004
Y								
Yarrow (Achillea Millefolium) Extract			X					IJT 20(S2):79-84, 2001
Z								
Zeolite	X				not in current use ¹			IJT 22(S1):37-102, 2003
Zinc Phenolsulfonate	X				up to 4%			JACT 5(5):373-90, 1986 confirmed 06/04 IJT 25(S2), 2006
Zinc Ricinoleate	X				up to 2%			Final Report 06/05 Available from CIR
Zinc Stearate	X				up to 51%			JACT 1(2):143-77, 1982 confirmed 11/01 IJT 22(S1):1-35, 2003
Zirconium Silicate	X				not in current use ¹			IJT 22(S1):37-102, 2003

¹ Were the ingredient to be used in the future, the expectation is that it would be used at concentrations comparable to others in the group.

² The expectation is that this ingredient is used at concentrations comparable to others in the group.

³ Safety as a hair dye ingredient was confirmed; but the use of p-Phenylenediamine with henna (so-called dark henna) for temporary tattoos is unapproved by FDA — p-Phenylenediamine is a known sensitizer, highly inappropriate for such use as evidenced by reports of severe adverse skin reactions to dark henna temporary tattoos.

⁴ The "Dimethicone Copolyol" terminology is no longer used; the following 36 ingredients are those currently listed that match this terminology:

Dimethicone PEG-7 Phosphate,	PEG-7 Dimethicone,	PEG-10 Dimethicone,
Dimethicone PEG-10 Phosphate,	PEG-8 Dimethicone,	PEG/PPG-25/25 Dimethicone,
Dimethicone PEG/PPG-7/4 Phosphate,	PEG-14 Dimethicone,	PEG/PPG-19/19 Dimethicone,
Dimethicone PEG/PPG-12/4 Phosphate,	PEG/PPG-14/4 Dimethicone,	PEG/PPG-27/27 Dimethicone,
Dimethicone PEG/PPG-20/23 Benzoate,	PEG/PPG-4/12 Dimethicone,	PEG/PPG-22/23 Dimethicone,
Dimethicone PEG-8 Benzoate,	PEG/PPG-20/20 Dimethicone,	PEG/PPG-3/10 Dimethicone,
Dimethicone PEG-6 Acetate,	PEG/PPG-8/14 Dimethicone,	PEG/PPG-16/2 Dimethicone,
Dimethicone PEG-8 Adipate,	PEG/PPG-20/6 Dimethicone,	PEG/PPG-22/24 Dimethicone,
PEG-3 Dimethicone,	PEG/PPG-20/15 Dimethicone,	PEG/PPG-15/15 Dimethicone,
PEG-9 Dimethicone,	PEG-12 Dimethicone,	PEG-17 Dimethicone,
PEG/PPG-20/29 Dimethicone,	PEG/PPG-18/18 Dimethicone,	PEG/PPG-20/23 Dimethicone, and
PEG/PPG-6/11 Dimethicone,	PEG/PPG-17/18 Dimethicone,	PEG/PPG-23/6 Dimethicone.

⁶ For ingredients that have been re-reviewed, the reported value reflects the most current use.

⁷ FDA has prohibited the use of Methylene Chloride in cosmetic products (21CFR§700.19), action which supercedes the CIR conclusion.

⁸ EPA has banned production of Trichloroethane for all but essential uses and FDA has determined that use in aerosol cosmetics is nonessential.