

SUMMARY

of DYES & PIGMENTS

admitted in

U.S.A. ↔ EUROPE

Food

Cosmetics

Pharmaceutical

Medical Devices

List of dyes and pigments admitted under the following laws:

USA – Regulated by the Food & Drugs Administration **FDA** under the **Code of Federal Regulations “Title 21”**
Europe – Regulated by the European Commission **EC** such as from database **CosIng**

The FDA distinguishes between substances that **require certification** and the ones **exempt** from it.

Meanwhile, CE admits all the substances listed that fall within purity parameters set by the guidelines.



FDA DYES

Useful Links:

[FDA - Color Additives in the U.S.A.](#)

[CosIng - European Commission Database](#)

FOR MORE INFORMATION ON EACH SUBSTANCE, FOLLOW THE LINKS BELOW

● = BATCH CERTIFICATION EXEMPT

● = BATCH CERTIFICATION REQUIRED

FOOD	DRUGS	COSMETICS	MEDICAL DEVICES	21 CFR Section	Straight Color	Colour Index Name	Color Index #
	●			73.1010	Alumina	PIGMENT WHITE 24	77002
●	●	●		73.30	Annatto extract	[E160b] NATURAL ORANGE 4	75120
●				73.90	β-Apo-8'-carotenal	[E160e] FOOD ORANGE 6	40820
●	●	●		73.95	β-Carotene	[E160a] FOOD ORANGE 5	40800
●				73.40	Beetroot Extract	[E162] Beetroot Extract	---
	●	●		73.1162	Bismuth oxychloride	PIGMENT WHITE 14 / 31	77163
●				73.69	Butterfly pea flower extract	Clitoria Ternatea Extract	---
●	●			73.70	Calcium carbonate	[E170] PIGMENT WHITE 18	77220
●	●			73.75	Canthaxanthin	[E161g] FOOD ORANGE 8	40850
●	●	●		73.85	Caramel	[E150a-d] NATURAL BROWN 10	77944
			●	73.3107	Carbazole violet	PIGMENT VIOLET 23	51319
●	●	●		73.100	Carmine / Cochineal extract	[E120] NATURAL RED 4	75470
●				73.300	Carrot oil	Daucus Carota Extract	---
●	●	●	●	73.125	Chlorophyllin copper-complex	[E141] NATURAL GREEN 3	75810
	●	●		73.1326	Chromium hydroxide green	PIGMENT GREEN 18	77289
	●	●	●	73.1327	Chromium oxide green	PIGMENT GREEN 17	77288
			●	73.1015	Chromium-cobalt-aluminum oxide	PIGMENT BLUE 36	77343
●				74.302	Citrus Red No. 2	SOLVENT RED 80	12156
		●		74.2052	D&C Black No. 2	PIGMENT BLACK 6 / 7	77266
		●		74.2053	D&C Black No. 3	PIGMENT BLACK 9	77267
			●	74.3054	D&C Black No. 4	PIGMENT BLACK 8	77268
	●	●		74.1104	D&C Blue No. 4	ACID BLUE 9	42090
			●	74.3106	D&C Blue No. 6	PIGMENT BLUE 66 / VAT BLUE 1	73000
			●	74.1109	D&C Blue No. 9	VAT BLUE 6	69825
		●		74.2151	D&C Brown No. 1	ACID ORANGE 24	20170
	●	●	●	74.1205	D&C Green No. 5	ACID GREEN 25	61570

FOOD	DRUGS	COSMETICS	MEDICAL DEVICES	21 CFR Section	Straight Color	Colour Index Name	Color Index #
	●			74.1206	D&C Green No. 6	SOLVENT GREEN 3	61565
	●	●		74.1208	D&C Green No. 8	SOLVENT GREEN 7	59040
	●	●		74.1260	D&C Orange No. 10	ACID RED 95	45425
	●	●		74.1261	D&C Orange No. 11	SOLVENT RED 73	45425:1
	●	●		74.1254	D&C Orange No. 4	ACID ORANGE 7	15510
	●	●		74.1255	D&C Orange No. 5	ACID ORANGE 11	45370
	●	●	●	74.1317	D&C Red No. 17	SOLVENT RED 23	26100
	●	●		74.1321	D&C Red No. 21	ACID RED 87	45380
	●	●		74.1322	D&C Red No. 22	SOLVENT RED 43	45380:2
	●	●		74.1327	D&C Red No. 27	SOLVENT RED 48	45410
	●	●		74.1328	D&C Red No. 28	ACID RED 92	45410
	●	●		74.1330	D&C Red No. 30	VAT RED 1 Al. Lake	73360
	●	●		74.1331	D&C Red No. 31	VAT RED 1 Talc Lake	73360
	●	●		74.1333	D&C Red No. 33	ACID RED 33 / FOOD RED 12	17200
	●	●		74.1334	D&C Red No. 34	PIGMENT RED 63:1 Ca Salt	15880:1
	●	●		74.1336	D&C Red No. 36	PIGMENT RED 4	12085
	●	●		74.1339	D&C Red No. 39	PIGMENT RED 100	13058
	●	●		74.1306	D&C Red No. 6	PIGMENT RED 57:1 Ca Lake	15850:1
	●	●		74.2307	D&C Red No. 7	PIGMENT RED 57	15850
	●	●	●	74.1602	D&C Violet No. 2	SOLVENT VIOLET 13	60725
	●	●	●	74.1710	D&C Yellow No. 10	[E104] ACID YELLOW 3	47005
	●	●		74.1711	D&C Yellow No. 11	SOLVENT YELLOW 33	47000
	●	●		74.1707	D&C Yellow No. 7	SOLVENT YELLOW 94	45350:1
	●	●	●	74.2708	D&C Yellow No. 8	ACID YELLOW 73	45350
		●		74.2602a	Ext. D&C Violet No. 2	ACID VIOLET 43	60730
	●	●		74.1707a	Ext. D&C Yellow No. 7	ACID YELLOW 1	10316
●	●	●		74.101	FD&C Blue No. 1	[E133] FOOD BLUE 2	42090
●	●		●	74.102	FD&C Blue No. 2	[E132] ACID BLUE 74	73015
●	●	●		74.203	FD&C Green No. 3	FOOD GREEN 3	42053
●	●			74.303	FD&C Red No. 3	[E127] ACID RED 51	45430

FOOD	DRUGS	COSMETICS	MEDICAL DEVICES	21 CFR Section	Straight Color	Colour Index Name	Color Index #
	●	●		74.1304	FD&C Red No. 4	FOOD RED 1	14700
●	●	●		74.340	FD&C Red No. 40	[E129] FOOD RED 17	16035
●	●	●		74.705	FD&C Yellow No. 5	[E102] ACID YELLOW 23	19140
●	●	●		74.706	FD&C Yellow No. 6	[E110] FOOD YELLOW 3	15985
			●	73.1025	Ferric ammonium citrate	Ferric ammonium citrate	---
	●	●		73.1298	Ferric ferrocyanide	PIGMENT BLUE 27	77510
●				73.250	Fruit juice	Fruit Juice (Various)	---
●				73.170	Grape skin extract	[E163] Anthocyanins	---
	●	●		73.1329	Guanine	NATURAL WHITE 1	75170
		●		73.2190	Henna	NATURAL ORANGE 6	75480
			●	73.1410	Logwood extract	NATURAL BLACK 1	75290
		●		73.2775	Manganese violet	PIGMENT VIOLET 16	77742
	●	●		73.1496	Mica	PIGMENT WHITE 20	77019
●	●		●	73.350	Mica-based pearl. pigments	Mica-based pearlescent pigments	---
●				74.250	Orange B	ACID ORANGE 137	19235
●				73.340	Paprika / Paprika oleoresin	[E160c] Paprika / Paprika oleoresin	---
			●	74.3045	Phthalocyanine blue	PIGMENT BLUE 15	74160
			●	73.3124	Phthalocyanine green	PIGMENT GREEN 7	74260
			●	73.3121	Polyhydroxyethyl methacrylate	REACTIVE BLACK 5	20505
			●	73.1375	Pyrogallol	OXIDATION BASE 32	76515
	●	●		73.1400	Pyrophyllite	PIGMENT WHITE 19	44004
			●	73.3121	Reactive Blue 163	REACTIVE BLUE 163	---
			●	73.3121	Reactive Blue 19	REACTIVE BLUE 19	61200
			●	73.3121	Reactive Blue 21	REACTIVE BLUE 21	---
			●	73.3121	Reactive Blue 4	REACTIVE BLUE 4	61205
			●	73.3129	Reactive Blue 69	REACTIVE BLUE 69	612037
			●	73.3121	Reactive Orange 78	REACTIVE ORANGE 78	---
			●	73.3121	Reactive Red 11	REACTIVE RED 11	---
			●	73.3121	Reactive Red 180	REACTIVE RED 180	181055
			●	73.3121	Reactive Yellow 15	REACTIVE YELLOW 15	---

FOOD	DRUGS	COSMETICS	MEDICAL DEVICES	21 CFR Section	Straight Color	Colour Index Name	Color Index #
			●	73.3121	Reactive Yellow 86	REACTIVE YELLOW 86	192755
●				73.450	Riboflavin	[E101] Riboflavin	---
●				73.500	Saffron	[E164] NATURAL YELLOW 6	75100
●				73.530	Spirulina extract	Spirulina Maxima Extract	---
●	●	●	●	73.200	Synthetic iron oxide(s)	[E172(i)] PIGMENT RED 101 / 102	77491
●	●	●	●	73.200	Synthetic iron oxide(s)	[E172(ii)] PIGMENT YELLOW 42 / 43	77492
●	●	●	●	73.200	Synthetic iron oxide(s)	[E172(iii)] PIGMENT BLACK 11	77499
	●			73.1550	Talc	PIGMENT WHITE 26	77718
●	●	●	●	73.575	Titanium dioxide	[E171] PIGMENT WHITE 6	77891
●				73.585	Tomato lycopene	[E160] NATURAL YELLOW 27	75125
●				73.600	Turmeric / oleoresin	[E100] NATURAL YELLOW 3	75300
		●		73.2725	Ultramarine(s)	PIGMENT GREEN 24	77013
		●		73.2725	Ultramarine(s)	PIGMENT BLUE 29	77007
		●		73.2725	Ultramarine(s)	PIGMENT RED 259	77007
		●		73.2725	Ultramarine(s)	PIGMENT VIOLET 17	77007
			●	73.3112	Vat Orange 1	VAT ORANGE 1	59105
●				73.260	Vegetable juice	Vegetable juices (Various)	---
	●	●		73.1991	Zinc oxide	PIGMENT WHITE 4	77947
			●	73.3100	1,4-Bis[(2-hydroxy-ethyl)amino]-9,10-anthracenedione bis(2-propenoic)ester copolymers	REACTIVE BLUE 247	61547
			●	73.3105	1,4-Bis[(2-methylphenyl)amino]-9,10-anthracenedione	SOLVENT BLUE 101	615670
			●	73.3106	1,4-Bis[4-(2-methacryloxyethyl) phenylamino] anthraquinone copolymers	REACTIVE BLUE 246	61548
			●	73.3120	16,17-Dimethoxydinaphtho(1,2,3-cd:3',2',1'-lm)perylene-5,10-dione	VAT GREEN 1	59825
			●	73.3117	16,23-Dihydrodinaphtho[2,3-a:2',3'-i]naphth[2',3':6,7]indolo[2,3-c]carbazole-5,10,15,17,22,24-hexone	VAT BROWN 1	70800
			●	73.3122	4-[(2,4-dimethylphenyl)azo]-2,4-dihydro-5-methyl-2-phenyl-3H-pyrazol-3-one	SOLVENT YELLOW 18	12740
			●	73.3123	6-Ethoxy-2-(6-ethoxy-3-oxobenzo[b]thien-2(3H)-ylidene)benzo[b]thiophen-3(2H)-one	VAT ORANGE 5	73335
			●	73.3119	7,16-Dichloro-6,15-dihydro-5,9,14,18-anthrazinetetrone	VAT BLUE 6 / D&C BLUE 9	69825
			●	73.3118	N,N'-(9,10-Dihydro-9,10-dioxo-1,5-anthracenediyl) bisbenzamide	PIGMENT GREEN 10	61725

SUMMARY

FOR MORE INFORMATION ON EACH SUBSTANCE, FOLLOW THE **LINKS** BELOW

DYES ALLOWED BY THE FDA IN

FOOD			PHARMACEUTICAL			COSMETICS		
EXEMPT FROM CERTIFICATION			EXEMPT FROM CERTIFICATION			EXEMPT FROM CERTIFICATION		
Straight Color	EEC	C.I. + LINK	Straight Color	Color Index Name	C.I. + LINK	Straight Color	Color Index Name	C.I. + LINK
Annatto Extract	E160b	75120	Aluminum Powder	Pigment White 1	77000	Annatto	Natural Orange 4	75120
B-Carotene	E160a	40800	Bismuth Oxychloride	Pigment White 14	77163	Bismuth Citrate	Pigment White 14	77163
B-Apo-8'-Carotenal	E160e	40820	Calcium Carbonate	Pigment White 18	77220	Bismuth Oxychloride	Pigment White 14	77163
Canthaxanthin	E161g	40850	Chlorophyllin / Complex	Natural Green 5	75815	Caramel	Natural Brown 10	77944
Caramel	E150a-d	77944	Chromium Hydro. Green	Pigment Green 18	77289	Iron Oxides (Black)	Pigment Black 11	77499
Carrot Oil	E160a (ii)	n / d	Chromium Oxide Greens	Pigment Green 17	77288	Iron Oxides (Red)	Pigment Red 101	77491
Chlorophyllin Na Cu	E140 (i)	75810	Ferric Ferrocyanide	Pigment Blue 27	77510	Iron Oxides (Yellow)	Pigment Yellow 42	77492
Carmine	E120	75470	Guanine	Natural White 1	75170	Manganese Violet	Pigment Violet 16	77742
Dehydrated Beet	E162	n / d	Mica	Pigment White 19	77005	β-Carotene	Food Orange 5	40800
Fruit Juice	n / a	n / d	Zinc Oxide	Pigment White 4	77947	Titanium Dioxide	Pigment White 6	77891
Grape Color Extr.	E163	n / d	SUBJECT TO CERTIFICATION			Ultramarines (Blue)	Pigment Blue 29	77007
Grape Skin Extr.	E163	n / d				Ultramarines (Pink)	Pigment Red 259	77007
Paprika	E160c	n / d	Straight Color	Color Index	C.I. + LINK	Ultramarines (Violet)	Pigment Violet 15	77007
Riboflavin	E101 (i)	n / d	D&C Blue No. 4	Food Blue 2:2	42090:2	SUBJECT TO CERTIFICATION		
Saffron	Nat. Yellow 6	75100	D&C Green No. 5	Acid Green 25	61570			
Spirulina Extract	n / d	n / d	D&C Green No. 6	Solvent Green 3	61565	Straight Color	Color Index	C.I. + LINK
Synth. Iron Oxide (R)	E172 (ii)	77491	D&C Green No. 8	Solvent Green 7	59040	D&C Black No. 2	Pigment Black 7	77266
Synth. Iron Oxide (Y)	E172 (iii)	77492	D&C Orange No. 10	Solvent Red 73	45425	D&C Black No. 3	Pigment Black 8	77268:1
Synth. Iron Oxide (B)	E172 (i)	77499	D&C Orange No. 11	Acid Red 95	45425	D&C Brown No. 1	Acid Orange 24	20170
Titanium Dioxide	E171	77891	D&C Orange No. 4	Acid Orange 7	15510	D&C Yellow No. 11	Solvent Yellow 33	47000
Tomato Lycopene Ext.	E160d (i-iii)	75125	D&C Orange No. 5	Solvent Red 72	45370	Fd&C Blue No. 1	Acid Blue 9	42090
Turmeric / Curcumin	E100	75300	D&C Red No. 17	Solvent Red 23	26100	Fd&C Green No. 3	Food Green 3	42053
Vegetable Juice	n / a	n / d	D&C Red No. 21	Solvent Red 43	45380			
SUBJECT TO CERTIFICATION			D&C Red No. 22	Acid Red 87	45380			
			D&C Red No. 27	Solvent Red 48	45410			
Straight Color	EEC	C.I. + LINK	D&C Red No. 28	Acid Red 92	45410			
Citrus Red No. 2	Not Permitted	n / d	D&C Red No. 30	Vat Red 1	73360			
Fd&C Blue No. 1	E133	42090	D&C Red No. 31	Pigment Red 64	15800			
Fd&C Blue No. 2	E132	73015	D&C Red No. 33	Acid Red 33	17200			
Fd&C Green No. 3	Not Permitted	42053	D&C Red No. 34	Pigment Red 63 (Ca)	15880			
Fd&C Red No. 3	E127	45430	D&C Red No. 36	D&C Red No. 36	12085			
Fd&C Red No. 40	E129	16035	D&C Red No. 39	Pigment Red 100	13058			
Fd&C Yellow No. 5	E102	19140	D&C Red No. 6	Pigment Red 57	15850			
Fd&C Yellow No. 6	E110	15985	D&C Red No. 7	Pigment Red 57:1	15850:1			
Orange B	Not Permitted	----	FD&C Red No. 4	Food Red 1	14700			