

FOOD and PHARMACEUTICAL grade DYES



**Natural
Dyes**

**Synthetic
Dyes**

A careful selection of **Natural Extracts** and a wide range of **Synthetic Dyes** offer a wide choice of solutions for every need.

Many products are also available "**Made in Italy**" to guarantee quality and facilitate many aspects of import / export, many others are available with different certifications such as FDA / Kosher / Bio / etc..

EUROPEAN & FDA CERTIFICATIONS



Food and Agriculture
Organization of the
United Nations



Natural Dyes / Natural Extracts are made in full compliance with the regulations on aromatic preparations. The dyes are all from traditional foods such as vegetables, spices and fruits selected with secondary colouring properties.

Synthetic Dyes are produced thanks to cutting-edge technologies and advanced control systems, guaranteeing a high degree of purity thanks to accurate analysis and control methods.

NATURAL FOOD DYES

(Coloring Foodstuff)



Natural Dyes are also defined as **Natural Extracts** and are mainly used in the food industry. Specially selected with secondary coloring properties, they are able to guarantee the highest standards of quality, stability and safety as they come from edible plant sources.

The entire production of natural dyes is completely *Made in Italy*

AVAILABLE IN: POWDER / LIQUID

Useful Links:

[FAO – Additives Compendium](#) | [EFSA – Food Database](#)

FOR MORE INFORMATION ON EACH SUBSTANCE VISIT THE LINKS BELOW

RIBOFLAVIN

INCI

[E 101](#) | [Riboflavin](#) | [Lactoflavin](#) | [Vitamin B2](#)

Riboflavin is a food coloring also known as vitamin B2 or lactoflavin. It is a yellow pigment present in minimal quantities: examples are milk, eggs, barley malt, leafy vegetables and yeast.

STABILITY

LIGHT: ●●○○○
HEAT: ●●●○○
FRUIT ACIDS: ●●○○○

SAFFLOWER

INCI

[CI Natural Yellow 5](#) | [Carthamus Tinctorius Extract](#)

Safflower, *Carthamus Tinctorius*, indigenous to the European flora, has been cultivated for centuries for its pigments from bright yellow to orange and for the typical sweet and honey-like flavouring properties.

STABILITY

LIGHT: ●●●○○
HEAT: ●●●●●
FRUIT ACIDS: ●●●○○

CURCUMIN

INCI

[E 100](#) | [CI 75300](#) | [Curcuma Longa Root Extract](#)

Curcumin is the main colouring pigment of turmeric, obtained by selective extraction of *Curcuma Longa*. Curcumin provides a bright yellow hue and is used as a supplement, cosmetic ingredient and food colouring or flavouring.

STABILITY

LIGHT: ●○○○○
HEAT: ●●●○○
FRUIT ACIDS: ●●●○○

LUTEIN

INCI

[E 161b](#) | [Tagetes Erecta Extract](#)

Lutein is found in green plants and flowers such as *Tagetes Erecta*. Extracts containing lutein are associated with various health benefits such as antioxidant properties. The main colouring principles are lutein and its fatty acid esters.

STABILITY

LIGHT: ●●●○○
HEAT: ●●●●●
FRUIT ACIDS: ●●●○○

ANNATTO

INCI

[E 160b](#) | [CI 75120](#) | [Annatto Tree Extract](#)

The annatto plant *Bixa Orellana* is a tropical tree that produces small seeds inside the pod of the fruit. The main pigments in the seeds are bixin and norbixin. Natural annatto color belongs to carotenoids.

STABILITY

LIGHT: ●●○○○
HEAT: ●●●○○
FRUIT ACIDS: ●○○○○

CAROTENES (from Algae)

INCI

[E 160a \(iv\)](#) | [CI 75310](#) | [β-Carotene](#)

Mix of natural carotenes obtained from *Dunaliella Salina Seaga*, native to south Australia. The main component is beta-carotene but alpha-carotene, lutein, zeaxanthin and beta-cryptoxanthin may be present.

STABILITY

LIGHT: ●●●○○
HEAT: ●●○○○
FRUIT ACIDS: ●●●○○

β-CAROTENE

INCI

[E 160a \(i\)](#) | [CI 40800](#) | [β-Carotene](#)

The β-carotene is a pigment widely present in nature, extracted from plants and plants. Depending on its concentration, it can give shades from yellow to orange.

STABILITY

LIGHT: ●●●○○
HEAT: ●●●○○
FRUIT ACIDS: ●●●○○

VEGETABLE CAROTENES

INCI
[E 160a \(ii\)](#) | [CI 75130](#) | [β-Carotene](#)

Vegetable carotenes are obtained by solvent extraction of strains of many edible plants. The main colouring principle is carotenoids of which beta-carotene accounts for the majority. It is available in different shades of yellow and orange.

	LIGHT: ●●●○
STABILITY	HEAT: ●●●○
	FRUIT ACIDS: ●●●○

β-CAROTENE (*Blakeslea Tr.*)

INCI
[E 160a \(iii\)](#) | [CI 40800](#) | [β-Carotene](#)

The natural β-carotene is obtained from the fermentation of the two main strains of the fungus *Blakeslea Trispora*. Mushroom native to the southern United States and South Asia, gives a colour ranging from yellow to red / orange.

	LIGHT: ●●●○
STABILITY	HEAT: ●●●○
	FRUIT ACIDS: ●●●○

BETA-APO-8'-CAROTENAL

INCI
[E 160e](#) | [CI 40820](#) | [β-Apo-8'-Carotenal](#)

The apocarotenal of orange hue belongs to the group of carotenoids. Naturally present in citrus fruits and vegetables such as spinach, apocarotenal also acts as a precursor of vitamin A although it has a less active content than β-carotene.

	LIGHT: ●●●○
STABILITY	HEAT: ●●●○
	FRUIT ACIDS: ●●●○

PAPRIKA

INCI
[E 160c \(ii\)](#) | [Capsanthin](#) | [Capsicum Annuum Extract](#)

Paprika (*Oleoresin*) *Capsicum Annuum* is a vegetable grown all over the world. The bright orange pigments (capsanthin and capsorubin) are extracted from the dried fruits of paprika. Contains minerals, vitamin C and capsaicin which provide great performance.

	LIGHT: ●●●○
STABILITY	HEAT: ●●●○
	FRUIT ACIDS: ●●●○

CARROT

INCI
[E 160a \(ii\)](#) | [CI 40800](#) | [Daucus Carota Extract](#)

The *Daucus Carota* gets its characteristic bright yellow-orange color in particular from carotenes, which are metabolized into vitamin A and is characterized by the typical aromatic compounds with a slight sweet vegetable flavor.

	LIGHT: ●●●○
STABILITY	HEAT: ●●●○
	FRUIT ACIDS: ●●●○

CARAMEL (Plain)

INCI
[E 150a](#) | [CI 77944](#) | [Caramel \(Color\)](#)

Simple caramel is prepared by the controlled heat treatment of carbohydrates. Acids, alkalis and salts (not ammonium compounds or sulphites) can be used to favour caramelization.

	LIGHT: ●●●●
STABILITY	HEAT: ●●●●
	FRUIT ACIDS: ●●○○

CARAMEL (Caustic Sulphite)

INCI
[E 150b](#) | [CI 77944](#) | [Caramel \(Caustic Sulphite\)](#)

Caustic sulphite caramel is prepared by controlled heat treatment of carbohydrates with or without acids or alkalis, in the presence of sulphite compounds; no ammonium compounds are used.

	LIGHT: ●●●●
STABILITY	HEAT: ●●●●
	FRUIT ACIDS: ●●○○

CARAMEL (Ammonia)

INCI
[E 150c](#) | [CI 77944](#) | [Caramel \(Ammonia\)](#)

Ammonia caramel is prepared by controlled heat treatment of carbohydrates with or without acids or alkalis, in the presence of ammonium compounds; no sulphite compounds are used.

	LIGHT: ●●●●
STABILITY	HEAT: ●●●●
	FRUIT ACIDS: ●●●○

CARAMEL (Sulphite-Ammonia)

INCI
[E 150d](#) | [CI 77944](#) | [Caramel \(Sulphite Ammonia\)](#)

Sulphite-Ammonia caramel is prepared by the controlled heat treatment of carbohydrates with or without acids or alkalis in the presence of both sulphite and ammonium compounds.

	LIGHT: ●●●●
STABILITY	HEAT: ●●●●
	FRUIT ACIDS: ●●●○

ELDERBERRY

INCI
[Elder](#) | [Sambucus Nigra Extract](#)

Elderberry *Sambucus Nigra* is found in the wild in northern and central Europe. The high content of cyanidin anthocyanin makes elderberry an ideal source for the production of concentrates.

	LIGHT: ●●●○
STABILITY	HEAT: ●●○○
	FRUIT ACIDS: ●●●●

BEETROOT

INCI
[E 162](#) | [Beet Extract](#) | [Beta Vulgaris Extract](#)

The *Beta Vulgaris* beet is native to all of Europe. The main ingredients, in addition to the sugary minerals and proteins, are the pigments betanin and vulgaxanthin. It has a bright strawberry red color.

	LIGHT: ●●○○○
STABILITY	HEAT: ●○○○○
	FRUIT ACIDS: ●●●○○

LYCOPENE

INCI
[E 160d \(i-iii\)](#) | [CI 75125](#) | [Lycopene](#)

Lycopene is a red carotenoid pigment found in tomatoes and other red fruits and vegetables. Lycopene is extracted from red tomatoes by extracting the tomato pulp, a concentrated lycopene oleoresin can be obtained.

	LIGHT: ●●●○○
STABILITY	HEAT: ●●●○○
	FRUIT ACIDS: ●●●○○

CARMINE

INCI
[E 120](#) | [CI 75470](#) | [Carminic Acid](#)

The carmine color originates from the female cochineal (*Dactylopius Coccus Costa*), which live on cacti native to South America and Mexico. Carmine, a calcium aluminum lake of carminic acid, provides an extremely stable red color.

	LIGHT: ●●●●●
STABILITY	HEAT: ●●●●●
	FRUIT ACIDS: ●●●○○

RED RADISH

INCI
[E 163](#) | [Raphanus Sativus Extract](#) | [Anthocyanins](#)

The coloring material is extracted from *Brassicaceae Raphanus Sativus*. The common red radish grows naturally in all temperate regions in many parts of the world. Red Radish Extract adds a red or pink color to foods, depending upon the exact concentration used.

	LIGHT: ●●●●●
STABILITY	HEAT: ●●●●○
	FRUIT ACIDS: ●●●●●

BLACK CARROT

INCI
[Black Carrot Extract](#) | [Daucus Carota Extract](#)

Daucus Carota black carrots originate from the Mediterranean regions. Anthocyanins are responsible for the purple-black colour. Black carrot is suitable for culinary purposes as well as being a source of natural bluish shades from red to dark red in foods.

	LIGHT: ●●●●●
STABILITY	HEAT: ●●●●○
	FRUIT ACIDS: ●●●●●

GRAPE

INCI
[E 163](#) | [Enocyanins \(Grape\)](#) | [Red Grape Extract](#)

Grape peel or enocyanin extract contains water-soluble pigments responsible for the attractive dark purple red color of grapes. These grapes come from highly pigmented varieties.

	LIGHT: ●●●●●
STABILITY	HEAT: ●●●●○
	FRUIT ACIDS: ●●●●●

RED POTATO

INCI
[E 163](#) | [Anthocyanins](#) | [Ipomoea Batatas Extract](#)

Red potatoes contain deep colored anthocyanins which are predominantly malvidin based. The excellences of this fruit-based product are the typical red-purple color and excellent stability.

	LIGHT: ●●●●○
STABILITY	HEAT: ●●●○○
	FRUIT ACIDS: ●●●●●

SPIRULINA

INCI
[Spirulina Algae Powder](#) | [Spirulina Extract](#)

Spirulina is known as a protein-rich food supplement, containing all essential amino acids. In addition, it is characterized by a high amount of the pigment phycobiliprotein, along with low concentrations of chlorophylls and carotenes.

	LIGHT: ●●●●○
STABILITY	HEAT: ●●●●○
	FRUIT ACIDS: ●●●●○

SPINACH

INCI
[Spinach Extract](#) | [Chlorophyll b](#)

The spinach *Spinacia Oleracea* is a vegetable native to Europe and Asia, their leaves have a high nutritional value and are rich in antioxidants. They contain chlorophyll a and b, carotenoids and various vitamins.

	LIGHT: ●●○○○
STABILITY	HEAT: ●●●○○
	FRUIT ACIDS: ●●○○○

CHLOROPHYLLS

INCI
[E 140 \(i\)](#) | [Chlorophylls](#)

Chlorophylls are widely found in nature and are responsible for plant photosynthesis. The deep green color is extracted from edible plant material, grass, alfalfa and nettle. Chlorophyll is fat soluble.

	LIGHT: ●●●●○
STABILITY	HEAT: ●●●●●
	FRUIT ACIDS: ●○○○○

CHLOROPHYLLIN

INCI
[E 140 \(ii\)](#) | [Chlorophyllins](#)

Chlorophyllin is a semi-synthetic mixture of water-soluble sodium copper salts derived from chlorophyll. Chlorophylline has also been used topically in the treatment of slow-healing wounds for more than 50 years without serious side effects.

	LIGHT: ●●●●○
STABILITY	HEAT: ●●●●●
	FRUIT ACIDS: ●●●●○

COPPER CHLOROPHYLL

INCI
[E 141 \(i\)](#) | [CI 75810](#) | [Copper Chlorophyll](#)

Copper chlorophyll is derived from natural chlorophyll with the addition of copper salt. In this process, the magnesium in the chlorophyll is replaced by copper. The resulting bright green colour shows better stability to acids, HEAT and LIGHT.

	LIGHT: ●●●●○
STABILITY	HEAT: ●●●●○
	FRUIT ACIDS: ●○○○○

COPPER CHLOROPHYLLIN

INCI
[E 141 \(ii\)](#) | [CI 75815](#) | [Sodium Copper Chlorophyllin](#)

Copper chlorophyllin is obtained by copper plating of chlorophyll. Copper chlorophyllin produces a blue green hue when dissolved in water and is often mixed with a yellow colour such as curcumin to provide lime green tints.

	LIGHT: ●●●●○
STABILITY	HEAT: ●●○○○
	FRUIT ACIDS: ●○○○○

VEGETAL CARBON

INCI
[E 153](#) | [CI 77266](#) | [Charcoal \(Coconut\)](#) | [Carbon](#)

Charcoal is produced by the carbonization of plant material at high temperatures. It is a very stable pigment resistant to HEAT, LIGHT and oxidation. It gives shades of grey to true black and is insoluble.

	LIGHT: ●●●●●
STABILITY	HEAT: ●●●●●
	FRUIT ACIDS: ●●●●●

CALCIUM CARBONATE

INCI
[E 170](#) | [CI 77220](#) | [Calcium Carbonate / Tartrate](#)

Calcium carbonate is a powder developed specifically for use in candy coated outside as an alternative to titanium dioxide. It gives a smooth and uniform surface allowing the application of delicate pastel colours even on dark coloured cores.

	LIGHT: ●●●●●
STABILITY	HEAT: ●●○○○
	FRUIT ACIDS: ●●●●○

TITANIUM DIOXIDE

INCI
[E 171](#) | [CI 77891](#) | [Titanium Dioxide \(Rutile\)](#)

Titanium dioxide, also known as titanium (IV) oxide or titania, is the natural oxide of titanium. It is preferred not only for food use but also for pharmaceutical and cosmetic use.

	LIGHT: ●●●●●
STABILITY	HEAT: ●●●●●
	FRUIT ACIDS: ●●●●●

SYNTHETIC FOOD DYES

(Dyes & Pigments)



Synthetic Food dyes are developed with cutting-edge technologies and thanks to advanced control systems, extremely high degrees of purity are achieved: the latter are ultimately guaranteed by accurate methods of analysis. Their exceptional purity allows them to be used in the most varied applications: food, cosmetic, pharmaceutical and industrial.

Many of the synthetic dyes shown are entirely *Made in Italy*

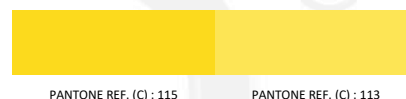
AVAILABLE IN: POWDER / GRANULAR / LIQUID / PASTE

Useful Links:

[Reg 231/2012 - Food Additives in Europe](#) | [FDA - Colour Additives in the U.S.A.](#)

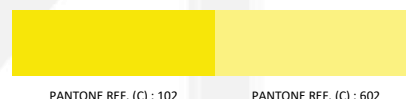
TARTRAZINE

EC: E102
TYPE: Soluble / Lake
COLOR INDEX: 19140
FDA: FD&C Yellow 5
pH: 2-8



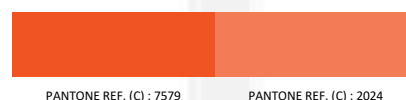
QUINOLINE YELLOW

EC: E104
TYPE: Soluble / Lake
COLOR INDEX: 47005
FDA: - Not Permitted -
pH: 2-8



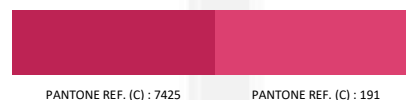
SUNSET YELLOW FCF

EC: E110
TYPE: Soluble / Lake
COLOR INDEX: 15985
FDA: FD&C Yellow 6
pH: 2-8



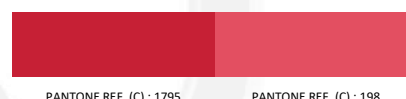
CARMINE

EC: E120
TYPE: Soluble / Lake
COLOR INDEX: 75470
FDA: Carmine
pH: 3



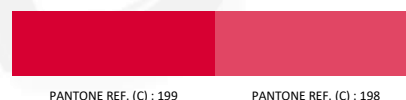
AZORUBIN

EC: E122
TYPE: Soluble / Lake
COLOR INDEX: 14720
FDA: - Not Permitted -
pH: 2-8



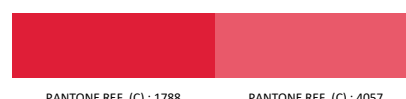
AMARANTH

EC: E123
TYPE: Soluble / Lake
COLOR INDEX: 16185
FDA: - Not Permitted -
pH: 2-8



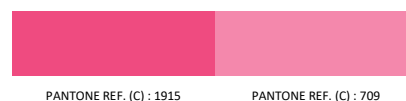
PONCEAU 4R

EC: E124
TYPE: Soluble / Lake
COLOR INDEX: 16255
FDA: - Not Permitted -
pH: 2-8



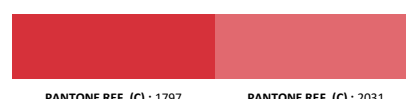
ERYTHROSINE

EC: E127
TYPE: Soluble / Lake
COLOR INDEX: 45430
FDA: FD&C Red 3
pH: 3-8



ALLURA RED

EC: E129
TYPE: Soluble / Lake
COLOR INDEX: 16035
FDA: FD&C Red 40
pH: 2-8



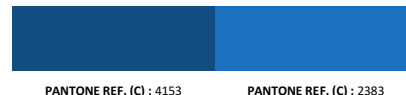
BLU PATENT V

TYPE: Soluble / Lake EC: E131 FDA: - Not Permitted -
COLOR INDEX: 42051 pH: 1-9



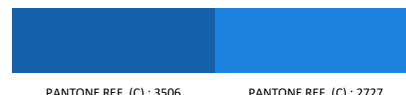
INDIGOTINE

TYPE: Soluble / Lake EC: E132 FDA: FD&c Blue 2
COLOR INDEX: 73015 pH: 2-8



BRILLANT BLUE FCF

TYPE: Soluble / Lake EC: E133 FDA: FD&C Blue 1
COLOR INDEX: 42090 pH: 2-8



GREEN S

TYPE: Soluble / Lake EC: E142 FDA: - Not Permitted -
COLOR INDEX: 44090 pH: 2-8



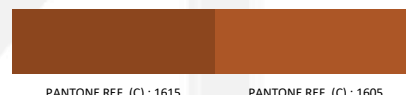
BRILLIANT BLACK BN

TYPE: Soluble / Lake EC: E151 FDA: - Not Permitted -
COLOR INDEX: 28440 pH: 2-8



BROWN HT

TYPE: Soluble / Lake EC: E155 FDA: - Not Permitted -
COLOR INDEX: 20285 pH: 2-8



CALCIUM CARBONATE

TYPE: Insoluble EC: E170 FDA: - Not Permitted -
COLOR INDEX: 77220 pH: 2-8



TITANIUM DIOXIDE

TYPE: Insoluble EC: E171 FDA: Titanium Dioxide
COLOR INDEX: 77891 pH: 2-8



BLACK IRON OXIDE

TYPE: Insoluble EC: E172 (i) FDA: Synth. Iron Oxide
COLOR INDEX: 77499 pH: 2-10



RED IRON OXIDE

TYPE: Insoluble EC: E172 (ii) FDA: Synth. Iron Oxide
COLOR INDEX: 77491 pH: 2-10



YELLOW IRON OXIDE

TYPE: Insoluble EC: E172 (iii) FDA: Synth. Iron Oxide
COLOR INDEX: 77492 pH: 2-10



FDA DYES & REGULATORY

AVAILABLE IN: POWDER / GRANULAR / LIQUID / PASTE

Useful Links:

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

FOR MORE INFORMATION ON EACH SUBSTANCE VISIT THE **LINKS** BELOW

FOOD			APPROVED FDA DYES IN DRUGS			COSMETICS		
EXEMPTED 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	SUBJECTED to Certification			Ultramarines (Blue)	Pigment Blue 29	77007
Grape Skin Extr.	E163	n / d	Straight Color	Color Index	C.I. + LINK	Ultramarines (Pink)	Pigment Red 259	77007
Paprika	E160c	n / d	D&C Blue No. 4	Food Blue 2:2	42090:2	Ultramarines (Violet)	Pigment Violet 15	77007
Riboflavin	E101 (i)	n / d	D&C Green No. 5	Acid Green 25	61570	SUBJECTED to Certification		
Saffron	Nat. Yellow 6	75100	D&C Green No. 6	Solvent Green 3	61565	Straight Color	Color Index	C.I. + LINK
Spirulina Extract	n / d	n / d	D&C Green No. 8	Solvent Green 7	59040	D&C Black No. 2	Pigment Black 7	77266
Synth. Iron Oxide (R)	E172 (ii)	77491	D&C Orange No. 10	Solvent Red 73	45425	D&C Black No. 3	Pigment Black 8	77268:1
Synth. Iron Oxide (Y)	E172 (iii)	77492	D&C Orange No. 11	Acid Red 95	45425	D&C Brown No. 1	Acid Orange 24	20170
Synth. Iron Oxide (B)	E172 (i)	77499	D&C Orange No. 4	Acid Orange 7	15510	D&C Yellow No. 11	Solvent Yellow 33	47000
Titanium Dioxide	E171	77891	D&C Orange No. 5	Solvent Red 72	45370	Fd&C Blue No. 1	Acid Blue 9	42090
Tomato Lycopene Ext.	E160d (i-iii)	75125	D&C Red No. 17	Solvent Red 23	26100	Fd&C Green No. 3	Food Green 3	42053
Turmeric / Curcumin	E100	75300	D&C Red No. 21	Solvent Red 43	45380			
Vegetable Juice	n / a	n / d	D&C Red No. 22	Acid Red 87	45380			
SUBJECTED to Certification			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			