

## Green Spring Natural Food Coloring Product List

No.	English Name	Primary Source	Color Properties	Typical Applications
1	Natural $\beta$ -Carotene (INS 160a)	Carrots, palm fruit, microalgae	Orange-yellow	Edible oils, health products, beverages
2	Beet Red (INS 162)	Red beetroot	Red-purple	Ice cream, jelly, yogurt
3	Turmeric (E100)	Turmeric rhizomes	Yellow	Curry, pickled foods, baked goods
4	Carthamus Yellow	Safflower petals	Yellow	Candy, beverages, noodles
5	Lac Red (INS 120)	Lac insect secretions	Red	Candy, acidic beverages
6	Cowberry Red	Cowberry fruit	Purple-red	Fruit wine, jam
7	Paprika Red (INS 160c)	Red peppers	Orange-red	Meat products, seasonings, snacks
8	Paprika Orange	Red peppers	Orange-yellow	Seasonings, puffed foods
9	Caramel Color (Class I, INS 150a)	Caramelized sucrose/glucose	Brown	Soy sauce, cola
10	Caramel Color (Class III, INS 150d)	Ammonia-caramelized sucrose/glucose	Dark brown	Baked goods, sauces
11	Red Rice Red	Red rice bran	Red	Fermented tofu, sausages
12	Chrysanthemum Yellow Extract	Chrysanthemum flowers	Yellow	Beverages, pastries
13	Black Bean Red	Black bean seed coat	Purple-red	Fruit wine, beverages
14	Sorghum Red	Sorghum husk	Red-brown	Meat products, beverages
15	Corn Yellow	Corn germ	Yellow	Margarine, candy
16	Radish Red	Red-heart radish	Red	Jam, beverages
17	Cocoa Husk Brown	Cocoa bean husk	Brown	Chocolate, ice cream
18	Red Yeast Rice	Rice fermented by Monascus	Deep red	Fermented tofu, rice wine
19	Monascus Red	Monascus metabolites	Deep red	Sausages, soy sauce
20	Basella Rubra Red	Basella fruit	Purple-red	Candy, beverages
21	Black Currant Red	Black currant fruit	Purple-red	Fruit wine, jelly
22	Gardenia Yellow	Gardenia fruit	Yellow	Noodles, pastries

23	Gardenia Blue	Enzyme-treated gardenia fruit	Blue	Candy, beverages
24	Sea Buckthorn Yellow	Sea buckthorn fruit	Yellow	Health products, fruit juice
25	Roselle Red	Roselle calyx	Purple-red	Fruit tea, jam
26	Acorn Shell Brown	Acorn shell	Brown	Baked goods, seasonings
27	NP Red	Natural plant extract	Red	Beverages, candy
28	Tanoak Brown	Tanoak leaves	Dark brown	Cola, soy sauce
29	Mulberry Red	Mulberry fruit	Purple-red	Fruit wine, vinegar
30	Natural Amaranth Red	Amaranth	Red	Candy, pastries
31	Cherokee Rose Brown	Cherokee rose fruit	Brown	Beverages, health foods
32	Curcumin	Turmeric rhizomes	Bright yellow	Dairy products, seasonings
33	Wild Jujube Pigment	Wild jujube peel	Red-brown	Beverages, jam
34	Peanut Skin Red	Peanut seed coat	Red-brown	Meat products, baked goods
35	Grape Skin Red	Grape skin	Purple-red	Fruit wine, vinegar
36	Blue Honeysuckle Red	Blue honeysuckle fruit	Blue-purple	Fruit juice, candy
37	Phycocyanin (Freshwater/Saltwater)	Spirulina, Nostoc	Blue	Health drinks, ice cream
38	Vegetable Carbon Black	Plant carbonization product	Black	Biscuits, pastries
39	Buddleja Yellow	Buddleja flowers	Yellow	Pastries, candy
40	Gromwell Red	Gromwell root	Purple-red	Fruit wine, cosmetics
41	Tea Yellow Pigment	Tea leaves	Yellow	Beverages, health products
42	Tea Green Pigment	Tea leaves	Green	Noodles, candy
43	Citrus Yellow	Citrus peel	Orange-yellow	Fruit juice, baked goods
44	Annatto (Bixin/Norbixin, INS 160b)	Annatto seeds	Orange-red	Cheese, butter, snacks
45	Carmine (Cochineal Extract, E120)	Cochineal insects	Bright red	Yogurt, candy, cosmetics
46	Iron Oxide Black (INS 172i)	Mineral extraction	Black	Candy, pharmaceutical coatings
47	Phycocyanin (Marine,	Marine algae	Blue	Functional foods

	INS 15)			
48	Erythrosine Aluminum Lake (INS 127)	Synthetic pigment lake	Red	Canned cherries, decorated pastries

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