

Codex-Recognized Natural Food Colors

INS Number	Name	Source
INS 100	Curcumin	Turmeric
INS 140	Chlorophylls	Green plants (e.g., alfalfa, spinach)
INS 141	Chlorophyllins	Water-soluble derivatives of chlorophyll
INS 150a-d	Caramel colors	Heat-treated carbohydrates (sugar, starch)
INS 160a	Carotene (beta-carotene)	Carrots, palm oil, algae
INS 160b	Annatto	Seeds of Bixa orellana
INS 160c	Paprika Oleoresin	Capsicum annuum (paprika pepper)
INS 160d	Lycopene	Tomatoes and other red fruits
INS 160e	Beta-apo-8'-carotenal	Synthesized or from natural sources
INS 160f	Ethyl ester of beta-apo-8'-carotenic acid	Natural or synthetic
INS 161b	Lutein	Marigold flowers
INS 162	Beet Red (Betanin)	Red beetroot
INS 163(i)	Anthocyanins	Grape skin, berries, purple corn
INS 171	Titanium dioxide	Mineral (Note: under review or banned in some countries)