

**COLOURS E Numbers**

**(100-181)**

| NUMBER       | NAME                                    | COMMENTS  |
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| 100<br>E100@ | Curcumin                                | Orange-yellow colour; derived from the root of the curcuma plant, but can be artificially produced; used in cheese, margarine, baked sweets and fish fingers It has beneficial effect on the blood sugar in diabetics. It can increase the liver's secretion of bile and protect the liver from toxic substances.   |
| 101<br>E101@ | Riboflavin, Riboflavin - 5'-[phosphate] | 'Vitamin B2' and colour; occurs naturally in green vegetables, eggs, milk, liver and kidney; used in margarine and cheese.  |
| 102<br>E102  | Tartrazine                              | FD&C Yellow No:5; CI Acid Yellow23, CI Food Yellow 4. Coal tar dye. Polycyclic Aromatic Hydrocarbon. Cancer probability. Known to provoke asthma attacks (though the US FDA** do not recognise this) and urticaria (nettle rash) in children (the US FDA** estimates 1:10 000), altered states of perception and behaviour, uncontrolled hyper agitation and confusion; wakefulness in young children. Is known to inhibit zinc metabolism and interfere with digestive enzymes. Tartrazine sensitivity is also linked to aspirin sensitivity; used to colour drinks, sweets, jams, cereals, snack foods, canned fish, packaged soups.<br><b>Banned in Norway, Austria and Finland. Restricted use in Sweden and Germany.</b>   |
| 103          | Alkanet<br>(Chrysoine resorcinol)       | Natural 'port-wine' colour from <i>A. tinctoria</i> plant. Listed in Australia in 1992. Banned in US in 1988.   |
| 104<br>E104  | Quinoline Yellow                        | D&C Yellow No:10; used in lipsticks hair products, colognes; also in a wide range of medications; It may cause asthma, rashes and hyperactivity. Aspirin sensitive people must avoid it.<br><b>Banned in Japan, USA and Norway.</b>   |
| E105         | Fast Yellow AB                          |   |
| E106         | Riboflavin - 5'-[sodium phosphate]      | Listed in Australia as 100 prior to 1992.   |
| E107         | Yellow 2G                               | Acid yellow 17, CI Food yellow 5. Coal tar dye. the HACSG* recommends to avoid it; It may cause asthma, rashes and hyperactivity. People sensitive to aspirin and asthma sufferers should avoid it. Typical products are soft drinks.<br><b>Banned in Australia (1992), Austria, Belgium, Denmark, France, Germany, Japan, Norway, Sweden, Switzerland, and USA.</b>  |
| 110<br>E110@ | Sunset Yellow FCF, Orange Yellow S      | FD&C Yellow No:6, CI Food yellow 3. Cancer Probability. Used in cereals, bakery, sweets, snack foods, ice cream, drinks and canned fish; synthetic; also in many medications including Berocca, Polaramine, Ventolin syrup; can provoke allergic reactions such as abdominal pain, hyperactivity, hives, nasal congestion, bronchoconstriction, kidney tumours, chromosomal damage, and distaste for food. It produces urticaria, swelling of the blood vessels, gastric upset. Potentially dangerous to asthmatics; and persons with rhinitis should avoid it, is know to upset some of the digestive enzymes. Has been linked to growth retardation and severe weight loss in animal tests and increased incidence of tumours in animals.<br><b>Banned in Finland, Norway and the UK.</b> |
| 120<br>E122@ | Cochineal, Carminic acid, Carmines      | Red colour; made from insects; rarely used; the HASCG recommends to avoid it, especially hyperactive's, rhinitis sufferers, urticaria, asthmatics and aspirin sensitive's.  |

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|                            |                             | <b>Banned in USA.</b>  |
| <b>122</b><br><b>E122</b>  | Azo Rubine, Carmoisine      | Red colour; coal tar derivative; may be carcinogenic. Can produce bad reactions in asthmatics and people allergic to aspirin; and can cause hyperactivity, urticaria and oedema. Typical products are confectionary, marzipan, jelly crystals.<br><b>Banned in Austria, Japan, Norway, Sweden and USA.</b>   |
| <b>123</b><br><b>E123</b>  | Amaranth                    | FD&C Red No. 2, CI Acid Red 27, CI Food red 9. Originally derived from the small herbaceous plant of the same name. Azo dye, Polycyclic Aromatic Hydrocarbon. Used in cake mixes, fruit-flavoured fillings, jelly crystals; can provoke asthma, eczema and hyperactivity; All child bearing women should avoid it as it could cause birth defects and foetal deaths. Can cause urticaria and liver problems possibly also cancer.<br><b>Banned in Austria, Japan, Norway, Russia, Sweden, the USA.</b>   |
| <b>124</b><br><b>E124</b>  | Ponceau 4R, Cochineal Red A | Artificial red dye, synthetic coal tar and azo dye, carcinogen in animals, can produce bad reactions in asthmatics and people allergic to aspirin; 1 in 10,000 people are allergic to 124.<br><b>Banned in Canada, Norway, USA (in 1976 for cancer causing agents). Restricted in Sweden.</b>  |
| <b>127</b><br><b>E127</b>  | Erythrosine                 | FD&C Red No:3; Coal tar dye; Polycyclic Aromatic Hydrocarbon. Artificial red colour used in cherries, canned fruit, custard mix, sweets, bakery, snack foods; can cause sensitivity to light and learning difficulties; can increase thyroid hormone levels and lead to hyperthyroidism, was shown to cause thyroid cancer in rats in a study in 1990; Used as an ingredient to kill maggot lava and flies. <b>Banned in January 1990, but not recalled by the US FDA**;</b><br><b>Banned in Norway.</b> |
| <b>E128</b>                | Red 2G                      | Colorant. Azo dye. May cause damage to genes. To be avoided by hyperactive people, asthmatics and aspirin sensitive people. Also a risk of skin rash and anaemia. Thought to be carcinogenic when added to foods. <b>Banned in Australia, Austria, Belgium, Denmark, Germany, Japan, Switzerland, New Zealand, USA, and many other places except UK.</b>   |
| <b>129</b>                 | Allura red AC               | FD&C Red No:40; Artificial orange-red colour used in sweets, drinks and condiments, medications and cosmetics, synthetic; introduced in the early eighties to replace amaranth which was considered not safe due to conflicting test results; <b>Allura red has also been connected with cancer.</b><br><b>Prohibited throughout the EEC.</b>  |
| <b>E131</b>                | Patent blue V               | Artificial colouring. May cause dermatitis and purpura. <b>Banned in Australia, Norway, Japan, New Zealand and USA.</b>  |
| <b>132</b><br><b>E132@</b> | Indigotine, Indigo carmine  | FD&C Blue No:2, synthetic coal tar dye. Commonly added to tablets and capsules; also used in ice cream, sweets, baked goods, confectionary, biscuits; may cause nausea, vomiting, high blood pressure, skin rashes, breathing problems, brain tumours and other allergic reactions.<br><b>Banned in Norway.</b>  |
| <b>133</b><br><b>E133</b>  | Brilliant blue FCF          | FD&C Blue Dye No:1, CI Acid blue 9, CI Food blue 2, CI Pigment blue 24. Polycyclic Aromatic Hydrocarbon, Triphenylmethane dye. Used in dairy products, sweets and drinks, synthetic usually occurring as aluminium lake (solution) or ammonium salt; Can cause hyperactivity, skin rashes, bronchoconstriction (combined with 127 and 132), chromosomal damage.<br><b>Banned in British Commonwealth 1972-1980. Banned in Austria, Belgium, France,</b>  |

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|                    |  | Germany, Norway Switzerland, Sweden.   |
| 140<br>E140        | Chlorophyllis, Chlorophyllins  | Green colour occurs naturally in all plants; used for dyeing waxes and oils, used in medicines and cosmetics. Excess can cause a sensitivity to light.   |
| 141                | Copper complexes of chlorophyll  | Olive colour, extracted from plants, no adverse effects are known when used in foods.  |
| E141               | Copper complexes of chlorophyll and Chlorophyllins<br>Copper Phaephytins | Olive colour, extracted from plants, no adverse effects are known when used in foods.  |
| 142<br>E142        | Green S  | CI Acid green 50, CI Food green 4. Green colour; synthetic coal tar derivative; used in canned peas, mint jelly and sauce, packet bread crumbs and cake mixes; May cause asthma, rashes and hyperactivity. Mutagenic in animal tests<br><br>Banned in Canada, Japan, Sweden, USA and Norway.   |
| 150<br>E150(a)     | Plain caramel  | Dark brown colour made from sucrose; the HACSG* recommends to avoid it as it can cause hyperactivity. Some caramels may damage genes, slow down growth, cause enlargement of the intestines and kidneys and may destroy vitamin B. It can be manufactured without ammonia. Used in oyster, soy, fruit and canned sauces, beer, whiskey, biscuits, pickles.   |
| E150(b)            | Caustic sulphite caramel   | See 150(a).  |
| E150(c)            | Ammonia caramel  | See 150(a).  |
| E150(d)            | Sulphite ammonia caramel   | See 150(a).  |
| 151<br>E151        | Brilliant Black BN, Black PN   | CI Food Black 1. Synthetic colour; coal tar derivative (may be carcinogenic); used in brown sauces, blackcurrant cake mixes; Potentially dangerous to asthmatics, probable cause for ADD in children and may cause urticaria and problem to rhinitis sufferers. Also known to interfere with some digestive enzymes.<br><br>Banned in Denmark, Australia, Belgium, France, Germany, Switzerland, Austria, USA, Norway and greatly restricted Sweden. |
| 153<br>E153@       | Vegetable carbon   | Black colour, charcoal pigment; used in jams, jelly crystals, liquorice; <b>only the vegetable derived variety permitted in Australia.</b><br><br>Banned in the United States  |
| E154               | Brown FK   | Kipper or Food Brown. Made from 6 azo dyes and sodium chloride and/or sodium sulphate. Banned in Austria, Australia, Japan, New Zealand, Switzerland, USA. All EEC countries except the UK.  |
| 155<br>E155        | (Chocolate) Brown HT   | brown colour, coal tar and azo dye; used in chocolate cake mixes; can produce bad reactions in asthmatics and people allergic to aspirin; also known to induce skin sensitivity; thought to be a carcinogenic in food, ADD children can have an adverse reaction to this dye.<br><br>Banned in Austria, Belgium, Denmark, France, Germany, Norway, Switzerland, Sweden, USA  |
| 160<br>E160(a)@    | Carotene, alpha-, beta-, gamma-  | Natural orange/yellow colour; human body converts it to 'Vitamin A' in the liver, found in carrots and other yellow or orange fruits and vegetables.   |
| 160(b)<br>E160(b)@ | Annatto, bixin, norbixin   | Red colour; derived from a tree (Bixa orellana); used as a body paint, fabric dye, antibacterial, antioxidant, digestive aid and expectorant; used to dye cheese, butter, margarine, cereals, snack foods, soaps, textiles and varnishes; known to cause urticaria (nettle rash) and flare-ups of angioneurotic oedema. It is implicated in asthma (containing salicylic acid) and hyperactivity. The HACSG* recommends to avoid it.                 |

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| <b>E160(c)@</b>                  | Paprika extract, capsanthin, capsorubin          | Not listed in Australia. Derived from fruit pods of the red pepper. Contains vitamins A, B, C and traces of Zn, Cu, Se, Co, Mo, etc. Avoid it.   |
| <b>E160(d)@</b>                  | Lycopene   | Not Listed In Australia. Avoid it. Banned in some countries  |
| <b>160(e)</b><br><b>E160(e)@</b> | Beta-apo-8'-carotenal (C 30)                     | Natural orange colour. No adverse effects are known.   |
| <b>160(f)</b><br><b>E160(f)@</b> | Ethyl ester of beta-apo-8'-carotenic acid (C 30) | Natural orange colour. No adverse effects are known.   |
| <b>161</b><br><b>E161</b>        | Xanthophylls                                     | Natural yellow colour derived from plants and animals, naturally found in green leaves, marigolds and egg yolks. Used in animal feed to colour the flesh and to enhance egg yolk colour as it is absorbed by the animals and stored in their tissue.   |
| <b>161</b><br><b>E161(b)</b>     | Xanthophylls - Lutein                            | Yellow colour derived from plants, naturally found in green leaves, marigolds and egg yolks.   |
| <b>E161(g)@</b>                  | Xanthophylls - Canthaxanthin                     | Yellow colour possibly derived from animal sources (retinol); the pigment is found in some mushrooms, crustacea, fish, flamingo feathers.  |
| <b>162</b><br><b>E162</b>        | Beetroot Red, Betanin                            | Purple colour derived from beets; no adverse effects are known, but restrict intake for small children and infants.  |
| <b>163</b><br><b>E163</b>        | Anthocyanins                                     | Violet, red, blue colour matter of flowers, buds and plants; it seems safe.  |
| <b>170</b><br><b>E170@</b>       | Calcium carbonate                                | Mineral salt, used in toothpastes, white paint and cleaning powders; may be derived from rock mineral or animal bones; sometimes used to de-acidify wines and firm canned fruit and veg.; toxic at 'high doses' due to mineral imbalance and many other physical problems such as haemorrhoids, kidney stones, abdominal pain, confused behaviour. |
| <b>171</b><br><b>E171</b>        | Titanium dioxide                                 | White colour used in toothpaste and white paint, pollutes waterways; no adverse effects are known.   |
| <b>172</b><br><b>E172</b>        | Iron oxides and hydroxides                       | Black, yellow, red colour used in salmon and shrimp pastes; toxic at 'high doses'.   |
| <b>E173</b>                      | Aluminium  | Not currently listed for use in Australia. Avoid it. Suspect of being a neurotoxic hazard and been linked to osteoporosis.   |
| <b>174</b><br><b>E174</b>        | Silver   | Not permitted in Australia prior to 1992. Long regular use can lead to blue-grey skin (this is not dangerous). Avoid it.   |
| <b>E175</b>                      | Gold   | Not listed for use in Australia. Avoid it.   |
| <b>E180</b>                      | Latolrubine BK                                   | Artificial colouring. Azo dye. Probable cause of rashes, hyperactivity, and potentially dangerous to asthmatics. Avoid it. Banned in Australia and New Zealand.  |
| <b>181</b><br><b>E181</b>        | Tannic acid, tannins                             | Clarifying agent in alcoholic drinks; derived from the nutgalls and twigs of oak trees; occurs naturally in tea. May cause gastric irritation.   |