

# Approved additives and E numbers

Additives and E numbers for colours, preservatives, antioxidants, sweeteners, emulsifiers, stabilisers, thickeners and other types of additives.

## Food additives guidance

This guidance provides information about requirements that you need to comply with, as specified in the retained EU [legislation on food additives](#).

[View Food additives legislation guidance to compliance as PDF](#) (191.49 KB)

### IMPORTANT

#### EU references in FSA guidance documents

The FSA is updating all EU references, to accurately reflect the law now in force, in all new or amended guidance published since the Transition Period ended at the end of 2020. In some circumstances it may not always be practicable for us to have all EU references updated at the point we publish new or amended guidance. Other than in Northern Ireland, any references to EU Regulations in this guidance should be read as meaning retained EU law. You can access retained EU law via HM Government's [EU Exit Web Archive](#). This should be read alongside any EU Exit legislation that was made to ensure retained EU law operates correctly in a UK context. EU Exit legislation is on [legislation.gov.uk](#).

In Northern Ireland, EU law will continue to apply in respect to the majority of food and feed hygiene and safety law, as listed in the [Northern Ireland Protocol](#), and retained EU law will not apply to Northern Ireland in these circumstances.

Most additives are only permitted to be used in certain foods and are subject to specific quantitative limits, so it is important to note this list should be used in conjunction with the appropriate legislation.

## Colours

<b>E numbers</b>	<b>Additives</b>
<b>E100</b>	Curcumin
<b>E101</b>	(i) Riboflavin (ii) Riboflavin-5'-phosphate
<b>E102</b>	Tartrazine
<b>E104</b>	Quinoline yellow
<b>E110</b>	Sunset Yellow FCF; Orange Yellow S
<b>E120</b>	Cochineal; Carminic acid; Carmines
<b>E122</b>	Azorubine; Carmoisine
<b>E123</b>	Amaranth
<b>E124</b>	Ponceau 4R; Cochineal Red A
<b>E127</b>	Erythrosine
<b>E129</b>	Allura Red AC
<b>E131</b>	Patent Blue V
<b>E132</b>	Indigotine; Indigo Carmine
<b>E133</b>	Brilliant Blue FCF
<b>E140</b>	Chlorophylls and chlorophyllins
<b>E141</b>	Copper complexes of chlorophyll and chlorophyllins
<b>E142</b>	Green S
<b>E150a</b>	Plain caramel
<b>E150b</b>	Caustic sulphite caramel
<b>E150c</b>	Ammonia caramel
<b>E150d</b>	Sulphite ammonia caramel
<b>E151</b>	Brilliant Black BN; Black PN
<b>E153</b>	Vegetable carbon
<b>E155</b>	Brown HT
<b>E160a</b>	Carotenes
<b>E160b(i)</b>	Annatto, bixin
<b>E160b(ii)</b>	Annatto, norbixin
<b>E160c</b>	Paprika extract; Capsanthin; Capsorubin
<b>E160d</b>	Lycopene
<b>E160e</b>	Beta-apo-8'-carotenal (C30)
<b>E161b</b>	Lutein
<b>E161g</b>	Canthaxanthin
<b>E162</b>	Beetroot Red; Betanin
<b>E163</b>	Anthocyanins
<b>E170</b>	Calcium carbonate
<b>E171</b>	Titanium dioxide
<b>E172</b>	Iron oxides and hydroxides
<b>E173</b>	Aluminium
<b>E174</b>	Silver
<b>E175</b>	Gold

<b>E numbers</b>	<b>Additives</b>
<b>E180</b>	Litholrubine BK

## **Preservatives**

<b>E numbers</b>	<b>Additives</b>
<b>E200</b>	Sorbic acid
<b>E202</b>	Potassium sorbate
<b>E210</b>	Benzoic acid
<b>E211</b>	Sodium benzoate
<b>E212</b>	Potassium benzoate
<b>E213</b>	Calcium benzoate
<b>E214</b>	Ethyl p-hydroxybenzoate
<b>E215</b>	Sodium ethyl p-hydroxybenzoate
<b>E218</b>	Methyl p-hydroxybenzoate
<b>E219</b>	Sodium methyl p-hydroxybenzoate
<b>E220</b>	Sulphur dioxide
<b>E221</b>	Sodium sulphite
<b>E222</b>	Sodium hydrogen sulphite
<b>E223</b>	Sodium metabisulphite
<b>E224</b>	Potassium metabisulphite
<b>E226</b>	Calcium sulphite
<b>E227</b>	Calcium hydrogen sulphite
<b>E228</b>	Potassium hydrogen sulphite
<b>E234</b>	Nisin
<b>E235</b>	Natamycin
<b>E239</b>	Hexamethylene tetramine
<b>E242</b>	Dimethyl dicarbonate
<b>E243</b>	Ethyl lauroyl arginate
<b>E249</b>	Potassium nitrite
<b>E250</b>	Sodium nitrite
<b>E251</b>	Sodium nitrate
<b>E252</b>	Potassium nitrate
<b>E280</b>	Propionic acid
<b>E281</b>	Sodium propionate
<b>E282</b>	Calcium propionate
<b>E283</b>	Potassium propionate
<b>E284</b>	Boric acid
<b>E285</b>	Sodium tetraborate; borax
<b>E1105</b>	Lysozyme

## **Antioxidants**

<b>E numbers</b>	<b>Additives</b>
<b>E300</b>	Ascorbic acid

<b>E numbers</b>	<b>Additives</b>
<b>E301</b>	Sodium ascorbate
<b>E302</b>	Calcium ascorbate
<b>E304</b>	Fatty acid esters of ascorbic acid
<b>E306</b>	Tocopherols
<b>E307</b>	Alpha-tocopherol
<b>E308</b>	Gamma-tocopherol
<b>E309</b>	Delta-tocopherol
<b>E310</b>	Propyl gallate
<b>E315</b>	Erythorbic acid
<b>E316</b>	Sodium erythorbate
<b>E319</b>	Tertiary-butyl hydroquinone (TBHQ)
<b>E320</b>	Butylated hydroxyanisole (BHA)
<b>E321</b>	Butylated hydroxytoluene (BHT)
<b>E392</b>	Extracts of rosemary
<b>E586</b>	4-Hexylresorcinol

## **Sweeteners**

<b>E numbers</b>	<b>Additives</b>
<b>E420</b>	(i) Sorbitol (ii) Sorbitol syrup
<b>E421</b>	Mannitol
<b>E950</b>	Acesulfame K
<b>E951</b>	Aspartame
<b>E952</b>	Cyclamic acid and its Na and Ca salts
<b>E953</b>	Isomalt
<b>E954</b>	Saccharin and its Na, K and Ca salts
<b>E955</b>	Sucralose
<b>E957</b>	Thaumatococin
<b>E959</b>	Neohesperidine DC
<b>E960</b>	Steviol glycoside
<b>E961</b>	Neotame
<b>E962</b>	Salt of aspartame-acesulfame
<b>E964</b>	Polyglycitol syrup
<b>E965</b>	(i) Maltitol (ii) Maltitol syrup
<b>E966</b>	Lactitol
<b>E967</b>	Xylitol
<b>E968</b>	Erythritol
<b>E969</b>	Advantame

## **Emulsifiers, stabilisers, thickeners and gelling agents**

<b>E numbers</b>	<b>Additives</b>
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<b>E322</b>	Lecithins
<b>E400</b>	Alginic acid
<b>E401</b>	Sodium alginate
<b>E402</b>	Potassium alginate
<b>E403</b>	Ammonium alginate
<b>E404</b>	Calcium alginate
<b>E405</b>	Propane-1,2-diol alginate
<b>E406</b>	Agar
<b>E407</b>	Carrageenan
<b>E407a</b>	Processed eucheuma seaweed
<b>E410</b>	Locust bean gum; carob gum
<b>E412</b>	Guar gum
<b>E413</b>	Tragacanth
<b>E414</b>	Acacia gum; gum arabic
<b>E415</b>	Xanthan gum
<b>E416</b>	Karaya gum
<b>E417</b>	Tara gum
<b>E418</b>	Gellan gum
<b>E425</b>	Konjac
<b>E426</b>	Soybean hemicellulose
<b>E427</b>	Cassia gum
<b>E432</b>	Polyoxyethylene sorbitan monolaurate; Polysorbate 20
<b>E433</b>	Polyoxyethylene sorbitan mono-oleate; Polysorbate 80
<b>E434</b>	Polyoxyethylene sorbitan monopalmitate; Polysorbate 40
<b>E435</b>	Polyoxyethylene sorbitan monostearate; Polysorbate 60
<b>E436</b>	Polyoxyethylene sorbitan tristearate; Polysorbate 65
<b>E440</b>	Pectins
<b>E442</b>	Ammonium phosphatides
<b>E444</b>	Sucrose acetate isobutyrate
<b>E445</b>	Glycerol esters of wood rosins
<b>E460</b>	Cellulose
<b>E461</b>	Methyl cellulose
<b>E462</b>	Ethyl cellulose
<b>E463</b>	Hydroxypropyl cellulose
<b>E464</b>	Hydroxypropyl methyl cellulose
<b>E465</b>	Ethyl methyl cellulose
<b>E466</b>	Carboxy methyl cellulose
<b>E468</b>	Crosslinked sodium carboxy methyl cellulose
<b>E469</b>	Enzymatically hydrolysed carboxy methyl cellulose
<b>E470a</b>	Sodium, potassium and calcium salts of fatty acids
<b>E470b</b>	Magnesium salts of fatty acids
<b>E471</b>	Mono- and diglycerides of fatty acids
<b>E472a</b>	Acetic acid esters of mono- and diglycerides of fatty acids
<b>E472b</b>	Lactic acid esters of mono- and diglycerides of fatty acids

<b>E472c</b>	Citric acid esters of mono- and diglycerides of fatty acids
<b>E472d</b>	Tartaric acid esters of mono- and diglycerides of fatty acids
<b>E472e</b>	Mono- and diacetyltartaric acid esters of mono- and diglycerides of fatty acids
<b>E472f</b>	Mixed acetic and tartaric acid esters of mono- and diglycerides of fatty acids
<b>E473</b>	Sucrose esters of fatty acids
<b>E474</b>	Sucroglycerides
<b>E475</b>	Polyglycerol esters of fatty acids
<b>E476</b>	Polyglycerol polyricinoleate
<b>E477</b>	Propane-1,2-diol esters of fatty acids
<b>E479b</b>	Thermally oxidised soya bean oil interacted with mono- and diglycerides of fatty acids
<b>E481</b>	Sodium stearyl-2-lactylate
<b>E482</b>	Calcium stearyl-2-lactylate
<b>E483</b>	Stearyl tartrate
<b>E491</b>	Sorbitan monostearate
<b>E492</b>	Sorbitan tristearate
<b>E493</b>	Sorbitan monolaurate
<b>E494</b>	Sorbitan monooleate
<b>E495</b>	Sorbitan monopalmitate
<b>E1103</b>	Invertase

## Others

Acid, acidity regulators, anti-caking agents, anti-foaming agents, bulking agents, carriers and carrier solvents, emulsifying salts, firming agents, flavour enhancers, flour treatment agents, foaming agents, glazing agents, humectants, modified starches, packaging gases, propellants, raising agents and sequestrants.

<b>E numbers</b>	<b>Additives</b>
<b>E260</b>	Acetic acid
<b>E261</b>	Potassium acetate
<b>E262</b>	Sodium acetate
<b>E263</b>	Calcium acetate
<b>E270</b>	Lactic acid
<b>E290</b>	Carbon dioxide
<b>E296</b>	Malic acid
<b>E297</b>	Fumaric acid
<b>E325</b>	Sodium lactate
<b>E326</b>	Potassium lactate
<b>E327</b>	Calcium lactate
<b>E330</b>	Citric acid
<b>E331</b>	Sodium citrates
<b>E332</b>	Potassium citrates

<b>E numbers</b>	<b>Additives</b>
<b>E333</b>	Calcium citrates
<b>E334</b>	Tartaric acid (L-(+))
<b>E335</b>	Sodium tartrates
<b>E336</b>	Potassium tartrates
<b>E337</b>	Sodium potassium tartrate
<b>E338</b>	Phosphoric acid
<b>E339</b>	Sodium phosphates
<b>E340</b>	Potassium phosphates
<b>E341</b>	Calcium phosphates
<b>E343</b>	Magnesium phosphates
<b>E350</b>	Sodium malates
<b>E351</b>	Potassium malate
<b>E352</b>	Calcium malates
<b>E353</b>	Metatartaric acid
<b>E354</b>	Calcium tartrate
<b>E355</b>	Adipic acid
<b>E356</b>	Sodium adipate
<b>E357</b>	Potassium adipate
<b>E363</b>	Succinic acid
<b>E380</b>	Triammonium citrate
<b>E385</b>	Calcium disodium ethylene diamine tetra-acetate; calcium disodium EDTA
<b>E422</b>	Glycerol
<b>E423</b>	Octenyl succinic acid modified gum Arabic
<b>E450</b>	Diphosphates
<b>E451</b>	Triphosphates
<b>E452</b>	Polyphosphates
<b>E459</b>	Beta-cyclodextrin
<b>E499</b>	Stigmasterol-rich plant sterols
<b>E500</b>	Sodium carbonates
<b>E501</b>	Potassium carbonates
<b>E503</b>	Ammonium carbonates
<b>E504</b>	Magnesium carbonates
<b>E507</b>	Hydrochloric acid
<b>E508</b>	Potassium chloride
<b>E509</b>	Calcium chloride
<b>E511</b>	Magnesium chloride
<b>E512</b>	Stannous chloride
<b>E513</b>	Sulphuric acid
<b>E514</b>	Sodium sulphates

<b>E numbers</b>	<b>Additives</b>
<b>E515</b>	Potassium sulphates
<b>E516</b>	Calcium sulphate
<b>E517</b>	Ammonium sulphate
<b>E520</b>	Aluminium sulphate
<b>E521</b>	Aluminium sodium sulphate
<b>E522</b>	Aluminium potassium sulphate
<b>E523</b>	Aluminium ammonium sulphate
<b>E524</b>	Sodium hydroxide
<b>E525</b>	Potassium hydroxide
<b>E526</b>	Calcium hydroxide
<b>E527</b>	Ammonium hydroxide
<b>E528</b>	Magnesium hydroxide
<b>E529</b>	Calcium oxide
<b>E530</b>	Magnesium oxide
<b>E535</b>	Sodium ferrocyanide
<b>E536</b>	Potassium ferrocyanide
<b>E538</b>	Calcium ferrocyanide
<b>E541</b>	Sodium aluminium phosphate
<b>E551</b>	Silicon dioxide
<b>E552</b>	Calcium silicate
<b>E553a</b>	(i) Magnesium silicate
	(ii) Magnesium trisilicate
<b>E553b</b>	Talc
<b>E554</b>	Sodium aluminium silicate
<b>E555</b>	Potassium aluminium silicate
<b>E570</b>	Fatty acids
<b>E574</b>	Gluconic acid
<b>E575</b>	Glucono delta-lactone
<b>E576</b>	Sodium gluconate
<b>E577</b>	Potassium gluconate
<b>E578</b>	Calcium gluconate
<b>E579</b>	Ferrous gluconate
<b>E585</b>	Ferrous lactate
<b>E620</b>	Glutamic acid
<b>E621</b>	Monosodium glutamate
<b>E622</b>	Monopotassium glutamate
<b>E623</b>	Calcium diglutamate
<b>E624</b>	Monoammonium glutamate
<b>E625</b>	Magnesium diglutamate
<b>E626</b>	Guanylic acid
<b>E627</b>	Disodium guanylate



<b>E numbers</b>	<b>Additives</b>
<b>E628</b>	Dipotassium guanylate
<b>E629</b>	Calcium guanylate
<b>E630</b>	Inosinic acid
<b>E631</b>	Disodium inosinate
<b>E632</b>	Dipotassium inosinate
<b>E633</b>	Calcium inosinate
<b>E634</b>	Calcium 5'-ribonucleotides
<b>E635</b>	Disodium 5'-ribonucleotides
<b>E640</b>	Glycine and its sodium salt
<b>E641</b>	L-leucine
<b>E650</b>	Zinc acetate
<b>E900</b>	Dimethylpolysiloxane
<b>E901</b>	Beeswax, white and yellow
<b>E902</b>	Candelilla wax
<b>E903</b>	Carnauba wax
<b>E904</b>	Shellac
<b>E905</b>	Microcrystalline wax
<b>E907</b>	Hydrogenated Poly-1-Decene
<b>E914</b>	Oxidised Polyethylene wax
<b>E920</b>	L-Cysteine
<b>E927b</b>	Carbamide
<b>E938</b>	Argon
<b>E939</b>	Helium
<b>E941</b>	Nitrogen
<b>E942</b>	Nitrous oxide
<b>E943a</b>	Butane
<b>E943b</b>	Iso-butane
<b>E944</b>	Propane
<b>E948</b>	Oxygen
<b>E949</b>	Hydrogen
<b>E999</b>	Quillaia extract
<b>E1200</b>	Polydextrose
<b>E1201</b>	Polyvinylpyrrolidone
<b>E1202</b>	Polyvinylpolypyrrolidone
<b>E1203</b>	Polyvinyl alcohol
<b>E1204</b>	Pullulan
<b>E1205</b>	Basic methacrylate copolymer
<b>E1206</b>	Neutral methacrylate copolymer
<b>E1207</b>	Anionic methacrylate copolymer
<b>E1208</b>	Polyvinylpyrrolidone-vinyl acetate copolymer

<b>E numbers</b>	<b>Additives</b>
<b>E1209</b>	Polyvinyl alcohol-polyethylene glycol-graft- co-polymer
<b>E1404</b>	Oxidised starch
<b>E1410</b>	Monostarch phosphate
<b>E1412</b>	Distarch phosphate
<b>E1413</b>	Phosphated distarch phosphate
<b>E1414</b>	Acetylated distarch phosphate
<b>E1420</b>	Acetylated starch
<b>E1422</b>	Acetylated distarch adipate
<b>E1440</b>	Hydroxyl propyl starch
<b>E1442</b>	Hydroxy propyl distarch phosphate
<b>E1450</b>	Starch sodium octenyl succinate
<b>E1451</b>	Acetylated oxidised starch
<b>E1452</b>	Starch aluminium Octenyl succinate
<b>E1505</b>	Triethyl citrate
<b>E1517</b>	Glyceryl diacetate (diacetin)
<b>E1518</b>	Glyceryl triacetate; triacetin
<b>E1519</b>	Benzyl alcohol
<b>E1520</b>	Propan-1,2-diol; propylene glycol
<b>E1521</b>	Polyethylene glycol