

## EU Food Additives List (Online Database)

15 December 2017

The list of food additives currently used in the European Union:<sup>1</sup>

- ‘Sweeteners’ give a sweet taste to foods or table-top sweeteners. They are used to make low calorie versions of foods and drinks.

Examples: Aspartame (E951) is used to make sweet-tasting low-calorie soft drinks. Sucralose (E955) can be used to give a sweet taste to low-energy yoghurts with no added sugar.

- ‘Colours’ add or restore colour in foods. They can be added to food to make up for colour losses, enhance naturally occurring colours, or to add colour to foods that would otherwise be colourless or coloured differently.

Examples: Riboflavin (E101, also known as vitamin B2) is used to enhance colour in preserves of red fruit like jams. Cochineal (E120) can be used to enhance red colour in fruit-flavoured breakfast cereals or flavoured processed cheese.

- ‘Preservatives’ extend the shelf-life of foods by protecting against loss of quality caused by microorganisms or protecting against the growth of illness-causing microorganisms.

Examples: Calcium propionate (E282) is used to slow down mould growth in bread and baked goods. Sorbic acid (E200) is used to prevent the growth of moulds in dairy products like cheese, or to treat the surface of unpeeled citrus fruits.

- ‘Antioxidants’ prolong the shelf-life of foods by protecting against oxidation. Oxidation is the process whereby food deteriorates in quality as it reacts with oxygen from the air, which can for example cause fats to become rancid or cut fruits turning brown.

Examples: Ascorbic acid (E300, also known as vitamin C) is used stop peeled, cut or shredded fruit and vegetables or in fruit juices to stop them from going brown.

- ‘Acids’ increase the acidity of foods and/or give a sour taste. ‘Acidity regulators’ change or control the acidity or alkalinity of foods.

Example: Citric acid (E330) is used to adjust the acidity of fruit and vegetable juices or ensure the right level of acid in tinned tomatoes. Tartaric acid (E334) is used to give a sour flavour to sweets.

- ‘Anti-caking agents’ stop powdered or granulated foods from sticking to one another.

Example: Silicon dioxide (E551) helps to stop clumping products like powdered sugar or sweeteners.

- 'Anti-foaming agents' prevent or reduce foaming.

Example: anti-foaming agents like polydimethylsiloxane (E900) can help prevent cooking oil from foaming while frying.

- 'Emulsifiers' let water and oils remain mixed together in an emulsion.

Example: lecithin (E322) is added to chocolate to avoid sugar crystallization and stop ingredients from separating.

- 'Emulsifying salts' convert the proteins contained in cheese into a dispersed form and to create an even distribution of fat and other components.

Example: sodium citrates (E331) are used to make dehydrated milk powder.

- 'Firming agents' strengthen the structure of food to keep it firm or crisp.

For example, calcium chloride (E509) is a firming agent used in canned fruit to help maintain their shape and texture.

- 'Flavour enhancers' enhance the existing flavours/odours of food. These are different from 'flavourings', which ingredients added to food in order to impart or modify odour and/or taste.

Example: monosodium glutamate (E621), which is used to enhance flavour in seasoning blends or condiments.

- 'Foaming agents' help to make foams by dispersing a gas in a liquid or solid food/ingredient.

Example: Quillaia extract (E900) is used in some fizzy soft drinks such as ginger beer.

- 'Thickeners' and 'gelling agents' improve the textures of foods by increasing the viscosity/thickness or by forming a gel; 'Bulking agents' increase the volume of foods without significantly changing the energy it provides.

Examples: pectin (E440) is used to help set jam. Starches are used in sauces to give them a thicker consistency.

- 'Stabilisers' are used to give foods maintain the physical and chemical state of a food for longer (for example, to keep emulsions stable for longer, maintain the colour of a food or bind together food pieces in reconstituted foods).

Example: Xanthan gum (E415) is used to stabilize emulsions in products like salad dressing where it

stops the oil from separating out of the mixture.

- ‘Glazing agents’ are applied to the outer surface of a food to give a shiny appearance or a protective coating;

Example: beeswax (E901) is used as a glazing agent in confectionery.

- ‘Humectants’ prevent foods from drying out or help powdered ingredients dissolve in water.

Example: polydextrose (E1200) is used in powdered table top sweeteners.

- ‘Modified starches’ are treated edible starches that have had one or more of their original characteristics changed. They can be modified to improve properties such as resistance to heat/cooling/freezing or to change their texture.

Example: modified starches (E1404) can be used to thicken the texture of reduced fat yoghurts.

- ‘Packaging gases’ are gases other than air, introduced into a food package before, during or after the placing of a food inside, for example to help preserve the quality of foods;

Example: Nitrogen (E941) can be used as a packaging gas in sealed packages to avoid food spoilage that occurs when foods react with the air.

- ‘Propellants’ help to expel foods from their container.

Example: nitrous oxide (E942) is used in whipped cream canisters, to help the cream to dispense as foam.

- ‘Raising agents’ trigger the release of gas which increases the volume of a dough or a batter;

Example: sodium bicarbonate (E500, also known as baking soda) and calcium phosphate (E341) are used to make self-raising flour.

- ‘Flour treatment agents’ are added to flour or dough to improve its baking quality.

Example: Ascorbic acid (E300) in flour can change the characteristics of dough and the resulting bread/bakery products (such as increased bread volume or texture changes).

- ‘Carriers’ dissolve, dilute, disperse a food additive, nutrient, enzyme or flavouring without changing their function, to make them easier to handling or use.