

Mintel GNPD Ingredients

Methodology

Mintel GNPD has created a structured classification of every ingredient of every product available on the GNPD. This new tool will enable complex analysis to be undertaken at an individual ingredient level or ingredient group/subgroup level.

Structure of Classification

The classification is a representation of every ingredient recorded on the GNPD. Its structure enables the GNPD to capture on-pack listings of ingredients and to classify all ingredients into groups and subsequent subgroup(s) for analysis purposes.

The classification structure also adheres to any global legislation, regulations and standards that exist.

This industry information and varying end use of ingredients means different factors were considered for ingredients within the different industries when designing the group and subgroup structure. These are explained in greater detail in the following sections.

▼ Food and Drink Functional Additives

Introduction	Legislation/regulations/ standards used to define the structure	Structure	Groups*
<p>'Food additive' shall mean any substance not normally consumed as a food in itself and not normally used as a characteristic ingredient of food, whether or not it has nutritive value, the intentional addition of which to food for a technological purpose in the manufacture, processing, preparation, treatment, packaging, transport or storage of such food results, or may be reasonably expected to result, in it or its by-products becoming directly or indirectly a component of such foods. (1333/2008/EC of the European Parliament and of the Council of 16 December 2008 on food additives.)</p>	<p>Codex Alimentarius Commission, Class Names and the International Numbering System for Food Additives Classes, CAC/GL 36-1989; European Union, Food Additive Classification in the European Union – food additives are regulated by Regulation (EC) No 1333/2008 of the European Parliament and of the Council of 16 December 2008 on food additives.</p>	<p>Considering that a food additive can have several functions (e.g. the food additive lecithin functions as both an emulsifier and antioxidant), they can be classified into more than one functional group. The function listed on-pack with the food additive will become the 'on-pack' function tag also and the additive will then also be classified into the subsequent functional groupings that it belongs to (even if these were not specified on the pack).</p> <p>Certain food additives may also be classified into groups which are food and drink product ingredient groups. (e.g. ascorbic acid is an antioxidant but it is also vitamin C, which is a micronutrient. It will be found in both the ingredient groups.)</p>	<p>Food and Beverage Functional Additive Groups (Acidity regulators, Anticaking agents, Antifoaming agents, Antioxidants, Bulking agents, Carbonating agents, Carriers, Colour retention agents, Emulsifiers, Emulsifying salts, Firming agents, Flavour enhancers, Flour treatment agents, Foaming agents, Food acids, Gelling agents, Glazing agents, Humectants, Packaging gases, Preservatives, Propellants, Raising agents, Sequestrants, Stabilisers, Thickeners, MISC Food and Drink Functional Additives).</p>

▼ **Food and Drink Product Ingredients**

Introduction	Legislation/regulations/ standards used to define the structure	Structure	Groups*
<p>There is currently no single universal food and/or food ingredients classification system, as the existing systems vary in their methodology for categorising food and food ingredients and may reflect different legislation.</p> <p>The most common classifications systems used internationally were consulted to produce the most accurate grouping of ingredients.</p>	<p>European Union Directives; Codex Alimentarius Specific Standards; US Food and Drug Administration (FDA). Federal Food Drug and Cosmetic Act, Title 21 Food and Drugs, Codex Alimentarius Classification of Food and Feed Commodities. 1993 Joint FAO/WHO Food Standards Programme Codex Alimentarius Commission, Codex Food Category System CODEX STAN 192-1995, EC Eurocode 2 Food Classification.</p>	<p>The groups and subgroups created delineate food ingredient groups whose members share certain characteristics. A group or subgroup for food and drink product ingredients may have been created based on any of the following criteria:</p> <p>Industry sectors – Ingredient groups have been created and named to reflect major industries, e.g. dairy and dairy products, meat and meat products, fruit and fruit products etc.</p> <p>Ingredient origin – Ingredients that are of a similar origin can be grouped together. Fats and oils for example are subgrouped according to the source of the fat, e.g. plant origin, animal origin, marine origin etc.</p> <p>Different manufacturing properties – Ingredients that undergo similar manufacturing conditions and processes can be grouped together, e.g. evaporated/powdered milks, fruit juice concentrates, and herbal extractions.</p> <p>Function of ingredients – Ingredients that provide a similar function to an end product application.</p> <p>Claims relating to ingredients – Ingredients which when added to a food product permit the use of claims etc. For example ingredients with a proven probiotic effect have been grouped together.</p> <p>Chemical structure – Ingredients that have a similar structure e.g. amino acids, nucleotides, and fatty acids.</p> <p>Form – The form the ingredient is in, e.g. powders.</p> <p>Legislation – Specific legislation, standards or regulations exist for a particular group or subgroup of ingredients.</p> <p>Consumption characteristics – e.g. product analogues such as cheese analogues or milk analogues can be grouped with the original ingredients because of their common end application use and possible end user comparisons.</p> <p>Hierarchy – The classification of the ingredients into a logical hierarchal structure is very important so that information can be retrieved at varying levels of specificity. All hierarchical relationships are displayed allowing ingredients to belong on logical grounds to more than one group or subgroup if it was deemed important for the ingredient to have multiple listings.</p>	<p>Food and Beverage Ingredient Groups (Sugars and other carbohydrate sweeteners, Dairy products (excluding cheese), Cheese and cheese products, Eggs and egg products, Edible fats and oils, Meat and meat products, Fish and fish products, Cereals and cereal products, Fruit and fruit products, Vegetables and vegetable products, Salt and salt substitutes, Nuts, seeds and kernels, Coffee and coffee products, Cocoa and cocoa products, Vinegars, Waters, Alcoholic beverages, Flavourings, Micronutrients and related products, Herbal substances, Herbal preparations, Food Enzymes, Probiotics, Prebiotics, Proteins, Nucleotides, Amino acids, Phytochemicals, Fatty acids, Yeast and yeast extracts, Food colours, Sweeteners and sugar alcohols, Soy products, MISC Food Ingredients, MISC Healthcare ingredients).</p>

▼ **Cosmetics and Personal Care Product Ingredients**

Introduction	Legislation/regulations/ standards used to define the structure	Structure	Groups*
<p>A 'cosmetic product' shall mean any substance or preparation intended to be placed in contact with the various external parts of the human body (epidermis, hair system, nails, lips and external genital organs) or with the teeth and the mucous membranes of the oral cavity with a view exclusively or mainly to cleaning them, perfuming them, changing their appearance and/or correcting body odours and/or protecting them or keeping them in good condition. (Directive 93/35/EEC, the Sixth Amendment to the original Cosmetic Directive of 1976.)</p> <p>'Cosmetic ingredient' means any chemical substance or preparation of synthetic or natural origin, except for perfume and aromatic compositions, used in the composition of a cosmetic product. (The Cosmetic Products (Safety) Regulations 2008.)</p>	<p>European Union Cosmetic Directive 76/768/EEC and its amendments European Union INCI Directive (2006/257/EC); Federal Food and Drug and Cosmetic (FD & C) Act.</p>	<p>Cosmetic and personal care product ingredients will be classified into functional groups and chemical classes.</p> <p>Functional Groups – Cosmetic and personal care product ingredients are classified based on the function that they perform in the finished product, e.g. conditioning agent, preservative etc. Many ingredients have multiple functions in formulations and are therefore classified into more than one functional group where applicable.</p> <p>Chemical Classes – Cosmetic ingredients are also classified on the basis of their chemical group, e.g. fats and oils, alcohols etc. Generally ingredients will only be placed in to one chemical class.</p> <p>These alternative groupings will allow a variety of end user analysis to be possible.</p>	<p>Cosmetic Functional Groups (Abrasive, Absorbent, Anticaking, Anticorrosive, Antidandruff, Antifoaming, Antimicrobial, Antioxidant, Antiperspirant, Antiplaque, Antiseborrhoeic, Antistatic, Astringent, Binding, Bleaching, Buffering, Bulking, Chelating, Cleansing, Cosmetic colorant, Denaturant, Deodorant, Depilatory, Detangling, Emollient, Emulsifying, Emulsion stabilising, Film forming, Foaming, Foam boosting, Gel forming, Hair conditioning, Hair dyeing, Hair fixing, Hair waving or straightening, Humectant, Hydrotrope, Keratolytic, Masking, Moisturising, Nail conditioning, Opacifying, Oral care, Oxidising, Pearlescent, Plasticiser, Preservative, Propellant, Reducing, Refatting, Refreshing, Skin conditioning, Skin protecting, Smoothing, Solvent, Soothing, Stabilising, Surfactant, Tanning, Tonic, UV absorber, UV filter, Viscosity controlling).</p> <p>Chemical Class Groups (Alcohols, Aldehydes, Alkanolamides, Alkanolamines, Alkoxyated alcohols, Alkoxyated amides, Alkoxyated amines, Alkoxyated carboxylic acids, Alkyl aryl sulfonates, Alkyl ether sulfates, Alkyl-substituted amino acids, Alkyl sulfates, Alkylamido alkylamines, Amides, Amine Oxides, Amines, Amino acids, Animal Derived Products, Benzophenones, Betaines, Biological polymers and their derivatives, Botanical Products, Carbohydrates, Carboxylic acids, Complex lipids, Elements, Essential Oils and Water, Esters, Ethers, Fats and Oils, Fatty acids, Fatty alcohols, Flavonoids, Glyceryl esters and derivatives, Gums, Hydrophilic colloids and Derivatives, Halogen compounds, Heterocyclic compounds, Hydrocarbons, Imidazoline compounds, Inorganic acids, Inorganic bases, Inorganic salts, Inorganics, Isethionates, Ketones, Lanolin and lanolin derivatives, Organic salts, Organometallics, Oximes, PABA derivatives, Parabens, Peptides, Phenols, Phosphorus compounds, Polymeric ethers, Polyols, Protein derivatives, Proteins, Quaternary ammonium compounds, Sarcosinates and Sarcosine derivatives, Siloxanes and silanes, Soaps, Sorbitan Derivatives, Sterols, Sulfonic acid, Sulfosuccinates and sulfosuccinamates, Sulfuric acid esters, Synthetic polymers, Thio compounds, Transesters, Unsaponifiables, Waxes, Yeasts and Ferments).</p>

▼ **Cleaning and Household Product Ingredients**

Introduction	Legislation/regulations/ standards used to define the structure	Structure	Groups*
<p>Ingredients used in cleaning and household products are not all required to be declared on the label. Alternatively some legislation specifies the mandatory labelling of certain ingredients or groups of ingredients.</p>	<p>European Union Detergent Regulations (EC) No 907/2006; Biocide regulations, Biocidal Product Directive (BPD) 98/8/EC, US Environmental Protection Agency (EPA).</p>	<p>The structure of the cleaning and household product ingredient classification will be based primarily on functioning of ingredients, e.g. surfactants, preservatives, builders etc. Ingredients can serve a variety of functions in a cleaning and household product. Ingredients can therefore be classified in more than one functional group.</p>	<p>Cleaning and Household Product Ingredient Groups (Allergic substances in detergents, Anti-redeposition agents, Biocides, Bleach precursors, Bleaching Agent, Builders, Dye transfer inhibitors, Enzymes, Enzyme stabilisers, Perfumes, Fabric softeners, Odor eliminators, Other Functions, Surfactants, Phosphonates).</p> <p>Chemical Class Groups (Alcohols, Aldehydes, Alkanolamides, Alkanolamines, Alkoxylated alcohols, Alkoxylated amides, Alkoxylated amines, Alkoxylated carboxylic acids, Alkyl aryl sulfonates, Alkyl ether sulfates, Alkyl-substituted amino acids, Alkyl sulfates, Alkylamido alkylamines, Amides, Amine Oxides, Amines, Amino acids, Animal Derived Products, Benzophenones, Betaines, Biological polymers and their derivatives, Botanical Products, Carbohydrates, Carboxylic acids, Complex lipids, Elements, Essential Oils and Water, Esters, Ethers, Fats and Oils, Fatty acids, Fatty alcohols, Flavonoids, Glyceryl esters and derivatives, Gums, Hydrophilic colloids and Derivatives, Halogen compounds, Heterocyclic compounds, Hydrocarbons, Imidazoline compounds, Inorganic acids, Inorganic bases, Inorganic salts, Inorganics, Isethionates, Ketones, Lanolin and lanolin derivatives, Organic salts, Organometallics, Oximes, PABA derivatives, Parabens, Peptides, Phenols, Phosphorus compounds, Polymeric ethers, Polyols, Protein derivatives, Proteins, Quaternary ammonium compounds, Sarcosinates and Sarcosine derivatives, Siloxanes and silanes, Soaps, Sorbitan Derivatives, Sterols, Sulfonic acid, Sulfosuccinates and sulfosuccinamates, Sulfuric acid esters, Synthetic polymers, Thio compounds, Transesters, Unsaponifiables, Waxes, Yeasts and Ferments).</p>

*Groups – every single ingredient will belong to at least one of these groups and then the corresponding subgroups where relevant. All of these will be able to be analysed using the current Plan-IT technology used on gnpd.com.