

Food Additives Tables

updated edition

Classes XIII-XV

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FOOD ADDITIVES TABLES

updated edition

Classes XIII—XV

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FOOD ADDITIVES TABLES

FOREWORD TO THE UPDATED EDITION

Since the publication of the first edition of the Food Additives Tables, two members of the working group passed away: Professor Dr. E.J. Bigwood and Mr. G. Art. The editorial team of the Tables now consists of: Mr. M. Fondu, Co-Director of the Bigwood Centre, Institute of European Studies of the University of Brussels; Mrs. H. Zegers de Beyl, “Licenciée en sciences chimiques”, of the University of Brussels; Mrs. G. Bronkers, “Docteur en sciences chimiques”; Mr. A. Stein, Food Legislation Adviser; Mrs. N. Verbiese, “Docteur en Pharmacie” of the University of Brussels; and Mr. M. Monnoye.

During the updating of the first edition it proved desirable to change the Tables completely. A computerized system is now used, which will facilitate future updating, and both the editorial team and the publisher hope that easier and quicker consultation of the material is now possible.

The division of the complete work in fifteen Classes of food products has remained unchanged. The main change is the replacement of the horizontal and vertical columns by a systematic classification which gives the details of regulations per category of additives - country for country - in the form of run-on texts.

Another change is the fact that the Tables will no longer appear in loose-leaf form. The complete Tables will now consist of four instalments in bound form. Each of these instalments can be replaced completely when future updatings appear.

GUIDE FOR THE USERS

The food products are divided in fifteen Classes that are sometimes subdivided; a list of these Classes and subdivisions is given in the Contents on p. v. Each Class or, when subdivided, each subdivision, is dealt with as a unit on its own; the number of the Class or subdivision is given in the upper left- and right-hand corners of the pages.

The food additives are divided in twenty-three categories; a list of these categories and the countries whose regulations are taken into account are given on p. ix.

For each food class the additives appear exclusively in an index on p. 3 of that Class when occurring at least once in the legislation of at least one country regarding permitted use for the purpose indicated (e.g. as antioxidant, as emulsifier, etc.). The texts give the regulations per category of food additives, country for country.

When in a Class an individual additive of the index is not listed for a certain country, this means that no regulations exist in that country regarding this particular use of this additive (NR). The same goes for countries not mentioned at all in the Class in connection with a whole category of additives from the index (NR).

When one (or more) single additive(s) of a homogeneous group of additives (salts, esters, etc.) in the index is not mentioned for a certain country (e.g. one ester out of three from the same radical) this means that the use of these single additives is prohibited in that country in this instance (P).

In some countries, owing to special legislations, regulation on use of additives may be extended beyond the additives in the index, to a list of “permitted additives” authorized for general use in food. In such case reference is made to the Appendix on Special Legislations.

Abbreviations used: P - Prohibited
GMP - Good Manufacturing Practice
AWL - Authorized Without Limitation
ASP - Authorized with Special Permission
NR - Not Regulated

Numbers in brackets refer to the reference notes appearing at the end of each Class or subdivision.

Further details about the information given in the Tables are available from the authors, Avenue F.-D. Rooseveltdt 39, 1050 Brussels, Belgium.

LIST OF CATEGORIES OF ADDITIVES

1. Acids, bases and salts
2. Anticaking agents
3. Antifoaming agents
4. Antioxidants and synergists
5. Colouring matters
6. Dispersing agents
7. Emulsifiers
8. Enzymes
9. Filter aids
10. Flavours and flavour enhancers
11. Foaming agents
12. Glazing agents or coating agents
13. Gum base
14. Leavening agents
15. Oxidizing agents
16. Preservatives
17. Propelling agents
18. Release agents
19. Solvents
20. Sweetening agents
21. Thickening agents
22. Vitamins and nutrients
23. Miscellaneous

LIST OF COUNTRIES

Austria
Belgium
Canada
Denmark
Finland
France
Germany (Fed. Rep. of)
Ireland
Italy
Japan
Luxemburg
Netherlands
Norway
Portugal
Spain
Sweden
Switzerland
U.K.
U.S.A.

CONTENTS

- Class XIII Confectioneries, Including Chocolate and Related Products
- Class XIV Seasonings, Condiments and Spices
- Class XV Broths, Soups and Mixed Products such as Ready-prepared Dishes

Appendix I Authorized Food Colourings

Appendix on Special Legislations

In further updatings:

Class I	Cereal Products	}	published in 1980
Class II	Sugars, Honey, Syrups, Jams, Marmalades, Jellies and Certain Spreads		
Class III	Nuts and Related Products		
Class IV	Potatoes and Related Products		
Class V	Vegetables, Legumes, Mushrooms	}	published in 1982
Class VI	Fruits and Related Products		
Class VII	Meat, Poultry and Related Products		
Class VIII	Fish, Shellfish and Related Products		
Class IX	Milk, Milk Products and Related Products such as Cheese	}	published in 1984
Class X	Eggs and Related Products		
Class XI	Fats and Oils, Including Butter and Margarine		
Class XII	Beverages and Drinks		

Class XIII - Confectioneries, Including Chocolate and Related Products

(This Class is up-to-date up to 2nd quarter of 1987)

Index of Food Additives of Class XIII**1. Acids, bases and salts**

Acetic acid
Adipic acid
Carbonates
Chlorides
Citric acid
Fumaric acid
Gluconates
Hydroxides
Lactic acid
Malic acid
Phosphates
Phosphoric acid
Sulfates
Tartaric acid

2. Anticaking agents

Magnesium carbonate
Magnesium oxide
Silica gel
Silicates
Silico-aluminates
Silicon dioxide
Stearates

3. Antifoaming agents

Dimethylpolysiloxanes
Silicones

4. Antioxidants and synergists

Ascorbic acid
Ascorbyl esters
BHA/BHT
EDTA
Gallates
Tocopherols

5. Colouring matters

Colouring matters see also Appendix I

6. Dispersing agents

Glycerol esters of wood rosin
Rosin esters

7. Emulsifiers

Fatty acid salts
Glycerides (esterified)
Glycerides (mono- and di-) of dietary fatty acids
Glycerides (phosphorylated)
Lecithin
Phosphatidic acid
Polyglycerol esters
Propylene glycol esters of fatty acids
Ricinoleates
Sorbitan compounds (polyoxyethylene derivatives)
Sorbitan esters of fatty acids
Soybean oil (thermally oxidized)
Stearoyl-2-lactylic acid
Stearyl esters
Sugar esters of fatty acids

Sugar glycerides
Sulfosuccinic acid monostearate

8. Enzymes

Unspecified enzymes

10. Flavours and flavour enhancers

Unspecified flavours

12. Glazing agents or coating agents

Beeswax
Candelilla wax
Carnauba wax
Coumarone-indene resin
Hydrocarbons (solid)
Paraffin
Petrolatum
Sandarach
Shellac
Vaselin
Zein

13. Gum base

Unspecified gum base

16. Preservatives

Benzoic acid
Benzoic acid (parahydroxy-)
Formic acid
Propionic acid
Sorbic acid
Sulfur dioxide generating compounds

18. Release agents

Lanolin
Mineral oils (hydrocarbons)
Spermaceti
Talcum

19. Solvents

Glycerol
Isopropyl alcohol
Propylene glycol
Triacetine

20. Sweetening agents

Aspartame
Dulcine
Glucose
Isomalt
K-Acesulfame
Maltitol
Mannitol
Neohesperidine dihydrochalcone
Saccharin
Sorbitol
Thaumatococcus
Xylitol

21. Thickening agents

Agar
Alginic acid
Arabic gum
Arabinogalactan
Benzoin gum
Carrageenan

Casein
Cellulose derivatives
Cellulose (microcrystalline)
Dextran
Galactomannan
Gelatin
Ghatti gum
Guar gum
Karaya gum
Locustbean gum
Pectin
Propylene glycol alginate
Starch see also Class I.6
Tragacanth gum
Xanthan gum

23. Miscellaneous

Caffeine
Calcium chloride
Calcium phytate
Carbon dioxide
Tannic acid and tannins

1. Acids, bases and salts

Austria

Acids, bases and salts (1): GMP (16).

Belgium

Citric, lactic and malic acids and their Ca, K, Na salts, tartaric acid and K, Na, K-Na salts: GMP (7).
Citric, malic and tartaric acids: GMP (6).
Ca orthophosphate: 7500 ppm in dusting starch used for dredging confectionery products: 1.5% (6).
K, Mg, Na, carbonates, K, Mg, Na hydroxides, NH_3 solutions: 5% expressed as K carbonate and calculated on dry defatted matter.
Citric and tartaric acids: 5000 ppm in cocoa beans, cocoa nibs, cocoa dust, cocoa mass, cocoa press cake, cocoa expeller press cake, cocoa powder, fat-reduced cocoa powder, only when treated with the mentioned alkaline products.
Other acids, bases and salts (2): P.

Canada

K, Na, NH_4 hydrogen carbonates, K, Mg, Na, NH_4 carbonates, K, Mg, Na, NH_4 hydroxides: GMP to process cocoa products (the total mass of these processing agents is not greater in neutralizing value calculated from the respective combining masses of such processing agents than the neutralizing value of three parts by mass of anhydrous K carbonate of each one hundred parts by mass of cocoa nib).
Phosphoric acid: GMP in cocoa, chocolate, milk chocolate, sweet chocolate.
Na hydrogen carbonate: GMP (7) as aerating agent.
Ca carbonate: GMP as creaming or fixing agent (7); GMP as filler (6).
Other acids, bases and salts (2): P.

Denmark

K, Mg, Na carbonates, Na hydrogen carbonate, Ca, K, Na, NH_4 hydroxides, Mg oxide: GMP (17) total ash content 14%, calculated on water-free and fat-free substance.
Citric and tartaric acids, singly or in mixture with carbonates, hydroxides or oxides: up to 5 g/kg (17).
 NH_4 chloride: 10% (14).
 NH_4 hydroxide, K, Mg, Na carbonates, K, Na, NH_4 hydrogen carbonates, acetic, citric, lactic and malic acids and their Ca, K, Na salts: GMP (14).
Phosphoric acid, di- NH_4 orthophosphate, mono-, di-, tri-Ca orthophosphates, mono-, di-, tri-K orthophosphates, mono-, di-, tri-Na orthophosphates, di-Na dihydrogen diphosphate, tetra-Na diphosphate, penta-Na phosphate, Na polyphosphate (5): 1000 ppm (14).
Tartaric acid and K, Na, K-Na salts (5): 1000 ppm (14); 7000 ppm in fruit toffees.
Other acids, bases and salts (2): P.

Finland

K, Mg, Na, NH_4 hydrogen carbonates, K, Mg, Na, NH_4 carbonates, K, Mg, Na, NH_4 hydroxides (5): 5% in cocoa beans, crushed cocoa and cocoa mass, in pressed cocoa cake and cocoa powder, in cocoa powder with sugar added (containing min. 32% cocoa or cocoa powder) and other cocoa products.

Citric and tartaric acids (5): 5% in cocoa beans, crushed cocoa and cocoa mass, in pressed cocoa cake and cocoa powder, in cocoa powder with sugar added (containing min. 32% cocoa or cocoa powder).
Na hydrogen carbonate, Ca, K, Mg, Na, NH_4 carbonates, Ca, K, Mg chlorides, acetic, citric, lactic, malic and tartaric acids, K, Na lactates, K, Na citrates, K, Na tartrates (5): 1.2% (38, 39).
Ca, K, Mg, Na, NH_4 carbonates, Na hydrogen carbonate, Ca, K, Mg chlorides, acetic, citric, lactic, malic and tartaric acids, K, Na lactates, K, Na citrates, K, Na tartrates: GMP (37, 38).
Ca carbonate, K chloride, fumaric, malic, citric and tartaric acids, K, Na citrates, K, Na tartrates (5): 3% (6).
 NH_4 chloride: GMP as flavouring (6, 37, 38).
Other acids, bases and salts (2): P.

France

Citric acid and K, Na salts, lactic acid and Ca, K, Na salts, tartaric acid and K, Na, Na-K salts: GMP (6, 7).
Malic acid and Ca, K, Na salts (5): 3% (6).
Mg carbonate, Ca hydrogen carbonate: GMP (6).
Al sulfate: 220 ppm as Al in "bigarreaux" intended to be candied.
K, Mg, Na carbonates, K, Mg, Na hydroxides, NH_3 solutions: 5% expressed as K carbonate calculated on dry defatted matter in cocoa beans, cocoa nibs, cocoa dust, cocoa mass, cocoa press cake, fat-reduced cocoa press cake, cocoa expeller press cake, cocoa powder, fat-reduced cocoa powder.
Citric and tartaric acids: 5000 ppm in the above mentioned cocoa products treated with the above mentioned alkalis.
 NH_4 chloride: GMP (6) as flavour enhancer.
Other acids, bases and salts (2): P.

Germany (Fed. Rep. of)

All acids, bases and salts listed in Appendix on special legislations (Germany): AWL for all confectionery, except chewing gum.
Ca, K citrates, K, Na tartrates: AWL in chewing gum with sour fruit taste.
Al oxide, Ca, Mg carbonates: AWL (6).

Ireland

Citric acid and Ca, K, Na salts, tartaric acid and K, Na, Na-K salts, Ca, K, Na citrates, orthophosphoric acid and Ca, K, Na salts, diphosphoric acid and Ca, K, Na salts, Na hydrogen diphosphate, Na tripolyphosphate, K polymetaphosphate, Na metaphosphate: GMP (as antioxidants).

Italy

Acids, bases and salts: (13).
Acetic, ascorbic, citric, lactic and tartaric acids: 4000 ppm (14).
Ca, K, Na citrates, K, Na, Na-K tartrates: GMP in caramels, chewing gum and moulded fruits (fruttini colati).
Other acids, bases and salts (2): P.

Japan

Acetic, adipic, citric, lactic, malic, phosphoric and tartaric acids: AWL (7, 36).

Acetates, carbonates, chlorides, phosphates, sulfates: AWL (7, 36).

Citrates, lactates, malates, tartrates: AWL (36).

Na hydroxide: GMP (7, 34).

Ca carbonate: 2% (as dietary supplement, calculated as Ca) (6).

Luxemburg

K, Mg, Na carbonates, K, Na hydroxides, Mg oxide, NH_3 solutions: 5% calculated as K carbonate on dry defatted matter of cocoa beans, cocoa nibs, cocoa dust, cocoa mass, cocoa press cake, fat-reduced cocoa press cake, cocoa expeller press cake, cocoa powder, fat-reduced cocoa powder.

Citric and tartaric acids: 5000 ppm in the above mentioned food treated with the above mentioned alkalis.

Other acids, bases and salts (2): P.

Netherlands

Alkali carbonates, alkali hydroxides, Mg carbonate, Mg oxide, NH_4 solution (5): 5% in cocoa beans, cocoa nibs, cocoa dust, cocoa mass, cocoa press cake, fat-reduced cocoa press cake, expeller cocoa press cake, cocoa powder, fat-reduced cocoa powder; a permitted base shall not be used in any cocoa product unless the ash content of the resulting product will not exceed 14% of the dry defatted matter.

Citric and tartaric acids (5): 5000 ppm only in case of the use of one or more of the above mentioned additives, in the same products.

Other acids, bases and salts (2): P (25).

Acids, bases and salts (1): NR (29).

Norway

NH_4 chloride, malic acid, citric acid and salts: GMP.

K, Na, NH_4 hydroxide, Ca, K, Na, NH_4 carbonates: 2.5% hydroxide or carbonate in cocoa mass.

Lactic and tartaric acids and Ca, Na, K salts: GMP (24); not for external spreading.

Na pyrophosphate (as water-binding agent): GMP (24).

Na gluconate: 5.4% (6).

Other acids, bases and salts (2): P.

Portugal

See reference note (41).

Spain

Citric and tartaric acids and their salts: 2.5% (6, 31).

Lactic acid and salts: 5000 ppm (6, 31).

Malic acid and salts: 1.2% (6, 31).

Ca, K, Na orthophosphates, citric, lactic and tartaric acids and their K, Na salts, K-Na tartrate: GMP as antioxidants (21, 23).

Citric and tartaric acids: 5000 ppm in cocoa paste and cocoa powder previously treated with alkaline or Mg hydroxide, oxide and carbonate, for pH adjustment.

Mono-, di- and tri-Na or K orthophosphate, di- and tetra-Na pyrophosphate, penta-Na triphosphate: 1000 ppm (as P_2O_5) (21, 23, 31); 1% (as P_2O_5) (6).

Ca carbonate: (6, 33, 34).

K carbonate: 5% calculated on dry matter in cocoa powder containing less than 14% ashes.

Alkaline or Mg oxide, hydroxide and carbonate:

GMP in cocoa products.

Other acids, bases and salts (2): P.

Sweden

NH_4 chloride: 7% (7, 20).

Ca, K, Na carbonates, Na bicarbonate, Ca orthophosphates, mono- and di- NH_4 orthophosphates, citric acid and Ca, K, Na salts, malic acid, Na acetate, Na gluconate, Ca, K, Na lactates: GMP (7, 20).

K-Al sulfate: 1000 ppm in marshmallows and similar foam products.

Na polyphosphates: 1000 ppm in marshmallows.

K chloride: 5000 ppm mixed with carrageenan (7, 20).

Tartaric acid and Ca, K, Na salts: 5000 ppm (7, 20).

Ca acetate, Na diacetate, lactic acid: GMP (7, 20).

Other acids, bases and salts (2): P.

See also Preservatives.

Switzerland

Acetic and citric acids and their Ca, K, Mg, Na, NH_4 salts, Na diacetate, lactic and malic acids and their Ca, K, Na, NH_4 salts, tartaric acid and Ca, K, Na, NH_4 , K-Na salts: GMP (6, 18, 19).

Gluconic acid and Ca, Na salts, Ca, K, Mg, Na, NH_4 , Al-Na orthophosphates: GMP (6).

NH_4 chloride: 2% in sugar products and chewing gum containing liquorice.

Ca, K, Mg, Na, NH_4 carbonates and hydroxides (5):

5% calculated on dried defatted cocoa, in cocoa beans, grain, mass, press cake, powder, fat-reduced powder, sweetened cocoa powder, sweetened fat-reduced cocoa powder.

Other acids, bases and salts (2): P.

U.K.

Acetic, citric, lactic, malic and tartaric acids and their Ca, K, Na salts, adipic acid, phosphoric acid, carbonates, chlorides: GMP (25).

Sulfates, phosphates, hydroxides, oxides: GMP (26).

Bases (calculated as K_2CO_3 on dry defatted matter):

5% (26); in case of their use, citric, tartaric and orthophosphoric acids (5): 5000 ppm (26) in cocoa nibs, cocoa beans, cocoa dust, cocoa fines, cocoa mass, cocoa press cake, fat-reduced press cake, expeller cocoa press cake, cocoa, cocoa powder, fat-reduced cocoa, fat-reduced cocoa powder.

K-Al sulfate: 1% in "glacé cherries".

Other acids, bases and salts (2): P.

U.S.A.

K, Na, NH_4 bicarbonates, K, Na, NH_4 carbonates, K, Na, NH_4 hydroxides, Mg carbonate, Mg oxide: GMP as processing aid (8).

Acetic acid: 5000 ppm (6); 1500 ppm (7).

Na acetate: 1500 ppm in hard candy; 2000 ppm in soft candy.

Adipic acid: 200 ppm (6, 7).

Ca hydroxide: 40 ppm in soft candy; 10 ppm (6, 7).

Malic acid: 8000 ppm in hard candy; 3% in soft candy; 7000 ppm (6, 7).

Ca sulfate: 700 ppm (6, 7).

Ca, K, Na, NH_4 carbonates, K, Na, NH_4 bicarbonates, K chloride, citric acid and Ca, K, Na salts, K, Na, NH_4 hydroxides, lactic acid and Ca salt,

Ca, Na hexametaphosphates, Ca mono-, di-, tribasic phosphates, Na mono-, di-, tribasic phosphates, Ca, Na diphosphates, Na acid diphosphate, phosphoric acid, K acid tartrate, tartaric acid, Na-K tartrate, Na tartrate: GMP (6, 7).

2. Anticaking agents

Austria

Anticaking agents (1): GMP (16).

Belgium

Mg silicate: 1000 ppm for dragee coating; 6000 ppm for chewing gum coating.

Mg stearate: 5000 ppm (7); 100 ppm (6).

Mg carbonate: see Acids, bases and salts.

Other anticaking agents (2): P.

Canada

Al-Mg, Mg silicates: GMP (6).

Mg carbonate, Mg silicate, Ca, Mg stearates, stearic acid: GMP as release agent (7).

Mg carbonate: see also Acids, bases and salts.

Mg silicate: 4000 ppm as glazing agent (7).

Stearic acid and K, Na salts: GMP as plasticizing agent (6).

Other anticaking agents (2): P.

Denmark

Mg stearate: GMP (14).

Mg carbonate, Mg oxide: see Acids, bases and salts.

Silicon dioxide: 2000 ppm (14).

Other anticaking agents (2): P.

Finland

Stearic acid and Ca, K, Mg, Na salts (5): 5000 ppm (37, 38) as surface treatment agent.

Stearic acid and K, Mg, Na salts (5): 5000 ppm (6).

Ca, K, Mg, Na silicates, Mg oxide (5): 2% (37, 38).

Mg carbonate: see Acids, bases and salts.

Other anticaking agents (2): P.

France

Mg carbonate: see Acids, bases and salts.

Mg silicate: 1000 ppm (as coating agent) (7).

Mg stearate: 5000 ppm in tablets.

Stearic acid and Ca, K, Mg, Na salts, Mg silicate: GMP (as coating agent) (6).

Germany (Fed. Rep. of)

Silicon dioxide, Al, Ca, Mg silicates: AWL (6).

Stearic acid and Ca, Mg salts: 3000 ppm (15); AWL (6).

Mg carbonate: see Acids, bases and salts.

Italy

Silicon dioxide: 2000 ppm in toffee, chewing gum and pastilles.

Other anticaking agents (2): P.

Japan

Mg silicate: 5% (6).

Mg carbonate: 5000 ppm (7).

Mg oxide: AWL (7, 36).

Acid clay, bentonite, diatomaceous earths, kaolin, perlite, sands, Mg silicate, water-insoluble mineral substances resembling these: 5000 ppm (7).

Other anticaking agents (2): P.

Luxemburg

Mg carbonate, Mg oxide: see Acids, bases and salts.

Netherlands

Anticaking agents (1): NR (25); P (29).

Mg carbonate, Mg oxide: see Acids, bases and salts.

Norway

Ca stearate: see Glazing agents or coating agents.

Na silico-aluminate: 1% (4).

Mg silicate: GMP (24).

Other anticaking agents (2): P.

Portugal

See reference note (41).

Spain

Mg oxide: see Acids, bases and salts.

Mg carbonate: (6, 33, 34), see also Acids, bases and salts.

Mg stearate: GMP (6, 31, 34).

Stearic acid, K, Na stearates: (6, 33, 34).

Other anticaking agents (2): P.

Sweden

Na alumino-silicate: 5000 ppm (7, 20) for surface treatment.

Stearic acid and Ca, K, Na salts: see Emulsifiers.

Other anticaking agents (2): P.

Switzerland

Mg carbonate: see Acids, bases and salts.

Mg silicate: GMP for surface treatment of sugar confectionery; 2% in "bonbons" (= tablet sugar confectionery).

Stearic acid and Ca, Mg salts: 2% in chewing gum and in "bonbons" (= tablet sugar confectionery).

Ca, Na silico-aluminates: 500 ppm in meringue shell.

Silicon dioxide: see Thickening agents.

Silica gel: P.

U.K.

Anticaking agents (1): P.

U.S.A.

Mg carbonate, Mg oxide: see Acids, bases and salts.

Al, Ca, K, Mg, Na salts of fatty acids, Na-Al silicate, Na-Ca-Al silicate, tri-Ca silicate, silicon dioxide: 2% (6, 7); see also Gum base.

Other anticaking agents (2): P.

3. Antifoaming agents

Austria

Antifoaming agents (1): GMP (16).

Belgium

Dimethylpolysiloxanes: 10 ppm (7).
Other antifoaming agents (2): P.

Canada

Antifoaming agents (1): P.

Denmark

Dimethylpolysiloxanes: 10 ppm (14).
Silicones: P.

Finland

Silicones: 3000 ppm with beeswax, paraffin oil, paraffin wax, shellac (as surface treatment agent) (37, 38).
Dimethylpolysiloxanes: P.

France

Antifoaming agents (1): P.

Germany (Fed. Rep. of)

Antifoaming agents (1): P.

Italy

Antifoaming agents (1): P.

Japan

Silicon resin: 50 ppm (7, 36).
Other antifoaming agents (2): P.

Netherlands

Antifoaming agents (1): NR (25); P (29).

Norway

Methyl and phenyl silicones: GMP.
Dimethylpolysiloxanes: P.
See also Appendix on special legislations.

Portugal

See reference note (41).

Spain

Dimethylpolysiloxanes: GMP (6, 31, 34).
Other antifoaming agents (2): P.

Sweden

Antifoaming agents (1): P.

Switzerland

Antifoaming agents (1): P.

U.K.

Dimethylpolysiloxanes: GMP (25).
Silicones: P (25).
Antifoaming agents (1): P (29).

U.S.A.

Dimethylpolysiloxanes: 10 ppm.
Other antifoaming agents (2): P.

4. Antioxidants and synergists**Austria**

l-Ascorbic acid and K, Na salts (as ascorbic acid), ascorbyl palmitate (as ascorbic acid), tocopherols: 1000 ppm (6) calculated on the gum base.
Other antioxidants and synergists (2): P.

Belgium

Gallates, BHA, BHT (5): 1000 ppm (6) calculated on gum base.
Other antioxidants and synergists (2): P.

Canada

BHA, BHT, propyl gallate (5): 200 ppm (6).
Other antioxidants and synergists (2): P.

Denmark

Ascorbic acid and Ca, Na salts (5): 200 ppm (14).
BHA, BHT (5): 20 ppm (14); 100 ppm (6).
Dodecyl, octyl, propyl gallates (5): 20 ppm (14).
Alpha, gamma, delta tocopherols and their natural extracts (5): 1000 ppm (14).
Other antioxidants and synergists (2): P.

Finland

Ascorbic acid and Na salt: 200 ppm (6, 37, 38, 39).
Ascorbyl palmitate, BHA (22), BHT (22): 200 ppm (35, 37, 38).

France

Ascorbic acid and Na salt, ascorbyl palmitate (5): 300 ppm (6, 7).
BHA, BHT, propyl, octyl, dodecyl gallates (5): 1000 ppm (6) on gum base.
Natural extract rich in tocopherol, alpha, gamma, delta, tocopherol (5): 2500 ppm on gum base.
EDTA: P.
BHT, octyl gallates authorized until 31-12-85.

Germany (Fed. Rep. of)

BHA, BHT, propyl, octyl, dodecyl gallates: 1000 ppm (6).
Ascorbyl palmitate, tocopherol acetate: AWL (6).

Ireland

Ascorbic acid and Ca, Na salts, ascorbyl diacetate, ascorbyl palmitate, extracts of natural origin rich in tocopherols, alpha, gamma, delta tocopherols: GMP.
Other antioxidants (2): P.
See also Acids, bases and salts.

Italy

Ascorbic acid and Ca, Na salts, diacetyl ascorbic acid: 1000 ppm (14).
Propyl, octyl, dodecyl gallates, BHA, BHT: 1000 ppm (6).
Other antioxidants or synergists (2): P.

Japan

BHT: 750 ppm (6).
Ascorbic acid and Na salt (erythorbic acid and Na salt), dl- α -tocopherol: AWL (7).
Other antioxidants and synergists (2): P.

Luxemburg

l-Ascorbic acid and Ca, Na salts, ascorbyl diacetate, ascorbyl palmitate, natural tocopherol extracts, synthetic α , γ , δ tocopherols, propyl, octyl, dodecyl gallates, BHA, BHT: GMP (7).

Netherlands

Antioxidants and synergists (1): NR (25); P (29).

Norway

Alkyl gallates: 100 ppm in crushed nougat and almond brittle (Smørkroken).
BHA, BHT (5): 1000 ppm (6).
Other antioxidants and synergists (2): P.

Portugal

See reference note (41).

Spain

Ascorbic acid and Ca, Na salts: 300 ppm (6, 21, 23, 31).
Ascorbyl diacetate, ascorbyl palmitate: 500 ppm (6, 21, 23, 31).
BHA, BHT, dodecyl gallate: 100 ppm (15, 21, 23, 35); 1000 ppm calculated on gum base (6).
Octyl gallate: 100 ppm (21, 23, 35).
Extracts of natural origin rich in tocopherols: GMP (6, 21, 23, 31).
Alpha and gamma tocopherols: GMP (21, 23).
EDTA: P.

Sweden

Ascorbic acid, tocopherols: 200 ppm (7, 20).
BHA, BHT: 100 ppm (7, 20, 21, 23).
Propyl, octyl, dodecyl gallates: 100 ppm (7, 20).
Other antioxidants and synergists (2): P.

Switzerland

BHA: 1000 ppm (6).
BHT: 300 ppm (6).
Other antioxidants and synergists (2): P.

U.K.

Ascorbic acid and Ca, Na salts, ascorbyl palmitate, tocopherols: GMP (25).
BHA, BHT, gallates may be present from carry-over.
BHT: 200 ppm in chewing gum from chewing gum base containing max. 1000 ppm.
EDTA: GMP in "glacé cherries" (26).
Antioxidants and synergists (1): P (29).

U.S.A.

Ascorbic acid, ascorbyl palmitate, tocopherols: GMP (6, 7).
BHA, BHT, propyl gallate: 200 ppm on fat content (7); 1000 ppm in chewing gum base.
Tocopherols: 300 ppm on fat content (6, 7).
Other antioxidants and synergists (2): P.

5. Colouring matters**Austria**

Authorized colouring matters (27): GMP in sugar coatings and glazings especially for decoration, coatings for dragees, sugar layers and other even coloured parts destined to decorate chocolate and sugar confectionery, pastry, and in chewing gum; P when the coatings have been prepared with milk, butter, honey, whole egg, egg yolk, malt, caramel, cocoa or chocolate; GMP in marzipan and "persipan" in fantasy shape, and other oilseeds, flavoured fillings, except those which have been prepared with milk, butter, honey, whole egg, egg yolk, caramel, cocoa or chocolate, in other confectionery except liquorice and those products which have been prepared with milk, butter, honey, whole egg, egg yolk, malt, caramel, cocoa or chocolate, in sugared liquid coatings (destined for pastry, icecream and fruit), except those prepared with milk, butter, honey, whole egg, egg yolk, malt, caramel, cocoa or chocolate, in fondant chocolate and glazings for it.

Belgium

In confectionery products: Caramel, Beetroot Red, Betanin, Anthocyanins, Xanthophylls, Vegetable carbon, Chlorophyll, Titanium dioxide: GMP.
In confectionery products: Tartrazin, Copper complexes of Chlorophyll and Chlorophyllins, Carotenoids: 100 mg/l; Curcumin, Erythrosine, Sunset Yellow FCF, Patent Blue V, Lactoflavin, Carmoisine, Indigocarmine, Wool Green BS: 50 mg/l; Brilliant Black BN: 20 mg/l; the total content of these colours may not exceed 150 mg/l.
In chewing gum: Tartrazin, Indigocarmine, Wool Green BS, Chlorophyll, Carotenoids, Beetroot Red, Anthocyanins, Xanthophylls, Copper complexes of Chlorophyll and Chlorophyllins, Vegetable carbon: 300 mg/l; Erythrosine, Sunset Yellow FCF, Patent Blue V: 100 mg/l; Carmoisine: 50 mg/l; the total content of these colours may not exceed 400 mg/l.
Ca carbonate, Iron oxides and hydroxides, Aluminium, Silver, Gold: GMP to colour surface of confectionery products.
Ca carbonate, Iron oxides and hydroxides, Titanium dioxide: GMP to colour surface of chewing gum.

Canada

Ponceau SX: 150 ppm in fruit "glacé", maraschino cherries.

Denmark

Aluminium, Gold, Silver: GMP for decoration of sugar confectionery.
Annato extracts: 10 ppm (14) as Bixine.
Azorubine, Black PN, Indigotine, Riboflavin: 100 ppm (14).
Ca carbonate, Carbo medicinalis vegetalis, Iron oxides and hydroxides, Caramel, Titanium dioxide: GMP (14).
Canthaxanthin, Chlorophyll and its Copper complexes (5): 150 ppm (14).
 β -Apo-8'-carotenal, alpha, beta, gamma-Carotene, β -Apo-8'-carotenic acid ester (5): 100 ppm (14).
Anthocyanins, Patent Blue V: 50 ppm (14).
Erythrosine, Sunset Yellow FCF, Tartrazin: 200 ppm