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Supporting document 3

Safety and food technology assessment

Proposal P1066 – Review of young child formula

Executive summary

Food Standards Australia New Zealand (FSANZ) is reviewing the existing provisions in the Australia New Zealand Food Standards Code (Code) as they apply to young child formula. These products are currently regulated as formulated supplementary foods for young children (FSFYC) under Division 4 of Standard 2.9.3 – Formulated meal replacements and formulated supplementary foods.

The focus of this assessment is to review existing provisions in the Code for their applicability to young child formula, with particular emphasis on the alignment of food additive permissions with relevant Codex standards, while continuing to ensure the safety of young children consuming these products.

Some differences exist between the Code, relevant Codex standards, and EU regulations, especially for food additive permissions. Whereas Codex and EU regulations mainly allow food additives for liquid follow-up formula or those reconstituted with water, the Code permits a broader range of food additives, including those suitable for use in solid foods. This is because the Code provisions for FSFYC cover a much broader range of foods than young child formula (i.e. formulated meal replacements and all formulated supplementary foods). To facilitate alignment with the Codex standard for Follow-Up Formula and Product for Young Children (CXS 156-1987) and provide regulatory clarity, FSANZ is proposing to establish a new stand-alone food class for young child formula in the table to section S15—5 Substances that may be used as food additives in the Code.

FSANZ's comparison of food additive permissions in the Code with those in CXS 156-1987 indicates many permissions are in alignment, although some differences exist in the permitted levels. FSANZ also identified 7 food additives with Codex provisions that are not currently permitted in the Code. FSANZ's assessment confirmed these food additives are safe for use in young child formula at the levels specified in CXS 156-1987.

The proposed young child formula food class will: retain food additive permissions in the Code which are in alignment with Codex, adopted at current Codex levels; and include 7 new food additives from CXS 156-1987. For some food additives currently permitted in the Code at Good Manufacturing Practice (GMP) levels this will represent a change from the status quo.

FSANZ's assessment also considered the suitability of permitting colours and intense

sweeteners in young child formula. While these food additives are permitted in the Code for use in formulated meal replacements and formulated supplementary foods, there are no corresponding provisions in CXS 156-1987, with which alignment is sought. FSANZ determined the addition of colours and intense sweeteners to young child formula is not technologically justified and therefore proposes to not include them in the new food class for young child formula.

FSANZ also reviewed Code provisions related to processing aids and contaminants to determine if additional specific measures were required for young child formula. Based on this review, FSANZ is proposing to apply the Maximum Levels established under Proposal P1028 - Infant Formula to young child formula, where appropriate.

In conclusion, FSANZ is proposing to establish a new food class for food additives in Schedule 15 of the Code, specific to young child formula, to facilitate alignment with CXS 156-1987 and provide regulatory clarity. This will ensure the Code provisions for young child formula reflect current international regulations and market development, while continuing to protect the health and safety of young children.

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1 Introduction

All young child formula must be safe for young children to consume. Young child formula is currently regulated as formulated supplementary foods for young children (FSFYC) in Division 4 of Standard 2.9.3 – Formulated meal replacements and formulated supplementary foods. FSFYC is a broader category of foods than young child formula.

This SD covers the assessment of requirements that relate to the safety and food technology aspects of young child formula, including maximum levels (MLs) of contaminants as well as permissions for food additives, processing aids and novel foods.

The purpose of this assessment was to review whether current requirements for FSFYC in the Code are suitable for young child formula, and to determine if amendments to the Code are needed to ensure the regulations for young child formula are fit for purpose and aligned with international regulations and market developments.

As described in the Call for submissions (CFS) Report (section 2), FSANZ proposes to establish a revised regulatory framework and regulatory provisions for young child formula as a stand-alone product class. As noted in the scope of the CFS Report (section 1.3), Proposal P1066 aims to review the application of the provisions in Standard 2.9.3 or Standard 2.9.3—Division 4 to young child formula.

The assessment included a review of existing requirements applicable to young child formula in the Code (currently regulated as FSFYC), a review of international regulations that relate to young child formula, especially Codex, and a safety assessment of proposed new additives currently not permitted in the Code for young child formula.

2 Food additives

2.1 Code provisions

Paragraph 1.1.1—10(6)(a) provides that, unless expressly permitted by the Code, a food for sale cannot contain, as an ingredient or component, a substance that is used as a food additive.

Section 1.1.2—11 defines the expression ‘used as a food additive’. Subsection 1.1.2—11(1) provides that a substance is ‘used as a food additive’ in relation to a food if both of the following conditions are met: the substance is added to the food to perform one or more technological functions listed in Schedule 14; and the substance is identified in subsection 1.1.2—11(2) – this includes (among other things) a substance identified in the table to section S15—5 as a permitted food additive.

Schedule 14 lists the permitted technological purposes of food additives, with the technological purposes performed by substances used as food additives, set out in table S14—2 Technological purposes.

Section 1.3.1—3 details when substances are permitted to be used as food additives in food. The table to section S15—5 of Schedule 15 lists the specific food additive permissions for different classes of foods.

The table to section S15—5 also lists the maximum permitted levels (MPLs) in relation to food additives that may be present in each food.

Schedule 16 sets out the types of substances that may be used as food additives in any food at Good Manufacturing Practice (GMP) levels.

Food additives perform roles such as improving the taste and appearance of processed foods, improving their keeping quality, stability and shelf life, and ensuring added substances (e.g. nutrients) are mixed and remain homogeneous in the final product. These functional properties are very important for formulated supplementary foods, including FSFYC.

2.2 Food additive permissions for products regulated by Standard 2.9.3

Food additive permissions in the Code for products regulated by Standard 2.9.3, including FSFYC, are listed in the table to section S15—5 under the broad food class number 13 – Special purpose foods, and in the food class 13.3 – Formulated meal replacements and formulated supplementary foods. Therefore, only additives listed in food class 13.3, within the table to section S15—5 of the Code, currently apply to young child formula.

For this assessment, the current permissions for food additives in food class 13.3 listed in the table to section S15—5 were compared with the corresponding Codex standard for follow-up formula for older infants and products for young children (additives conforming with CXS 156-1987) (Food Class 13.1.2)[1]. This comparison enabled FSANZ to determine whether alignment with CXS 156-1987 is appropriate for young child formula in Australian and New Zealand.

The Code permits many more food additives in food class 13.3 listed in the table to section S15—5 than CXS 156-1987 (see Appendix 1). Division 4 of Standard 2.9.3, which applies to FSFYC, was not established specifically for young child formula. Instead, it covers food additive permissions for a wide variety of foods, including formulated supplemented drinks and solid foods. As a result, direct comparisons with Codex Follow-Up Formula are not always appropriate. Furthermore, the food additive permissions provided in CXS 156-1987 establish numerical MPLs rather than rely on GMP, which applies to most food additives permitted in food class 13.3 in the Code.

FSANZ is proposing to include a new food class for young child formula in the table to section S15—5 of the Code. The intent of establishing a new food class is facilitate harmonisation with the current permissions in CXS 156-1987 under the General Standard for Food Additives (GSFA), Food Category (FC) 13.1.2. Refer also to Section 2.5 below.

2.3 Carry-over principle

The ‘carry-over principle’ is recognised internationally and pertains to the presence of food additives in a final product due to their permitted use in the raw materials or ingredients during production. While these food additives serve a technological purpose in the initial ingredients, they do not perform such a function in the final food product. This principle applies when a food additive is permitted in one or more ingredients used in manufacturing the final food product, regardless of whether the food additive is specifically permitted in the final food product itself.

The key conditions, as set out in subsection 1.3.1—3(2) provide:

- a substance permitted as a food additive may be present in any food (other than an IFP) as a result of carry-over from a raw material or an ingredient if the level of the substance in the food is no greater would be introduced by the use of the raw material

[1] Adopted in 1987 and revised in 2023.

or ingredient under proper technological conditions and GMP.

- that the presence of the food additive in the final product via the carry-over principle, must not have any technological function.

Carry-over is referred to by CXS 156-1987 as meaning:

Only the food additives listed in food category 13.1.2 (Follow-up formulae) of the General Standard for Food Additives (CXS 192-1995) or in the Advisory Lists of Nutrient Compounds for Use in Foods for Special Dietary Uses Intended for Infants and Young Children (CXG 10-1979) may be present in the foods described in Section 2.1 of this section, as a result of carry-over from a raw material or other ingredient (including food additive) used to produce the food, subject to the following conditions:

a) The amount of the food additive in the raw materials or other ingredients (including food additives) does not exceed the maximum level specified; and

b) The food into which the food additive is carried over does not contain the food additive in greater quantity than would be introduced by the use of the raw materials or ingredients under good manufacturing practice, consistent with the provisions on carry-over in the Preamble of the General Standard for Food Additives (CXS 192-1995).

The carry-over principle ensures food additives are used safely and within regulatory limits, even when they are carried over from raw materials or ingredients to the final food.

2.4 GMP permissions

Under food class 13.3 listed in the table to section S15—5 of the Code, food additives are permitted to be added to formulated meal replacements and formulated supplementary foods subject to the condition that use complies with GMP. GMP is defined in the Code as:

***GMP** or **Good Manufacturing Practice**, with respect to the addition of substances used as food additives and substances used as processing aids to food, means the practice of:*

(a) limiting the amount of substance that is added to food to the lowest possible level necessary to accomplish its desired effect; and

(b) to the extent reasonably possible, reducing the amount of the substance or its derivatives that:

*(i) remains as a *component of the food as a result of its use in the manufacture, processing or packaging; and*

(ii) is not intended to accomplish any physical or other technical effect in the food itself;

(c) preparing and handling the substance in the same way as a food ingredient.

Furthermore:

'a reference to 'GMP' is a reference to the maximum level necessary to achieve 1 or more technological purposes under conditions of GMP'.

Under GMP, manufacturers must limit the quantity of each additive to what is strictly needed, avoid unnecessary excess, and ensure that any residues of the additive in the final product do not serve any unintended technological purpose. This approach safeguards young children by preventing the overuse of food additives and maintaining compliance with regulatory standards.

FSANZ's assessment identified that, under food class 13.3 listed in the table to section S15—5, the use of certain food additives in young child formula may not comply with GMP. As stated above, this is likely because food class 13.3 covers a broad range of foods, many of which are not intended for young children. As Proposal P1066 aims to harmonise with CXS 156-1987, which permits fewer food additives in follow-up formula, the existing GMP

permissions provided by the Code may be subject to removal for young child formula products.

2.5 Comparing international permissions

The Code

Food additive permissions for products regulated as formulated supplementary foods, including FSFYC, are listed in the table to section S15—5. This table uses a hierarchical food class system for food additive permissions and formulated meal replacements and formulated supplementary foods products are listed in the food class 13.3 under *Special purpose foods* (Table 1). Schedule 3–Identity and purity lists relevant specifications for food additives, for which they must also comply, when sold or added to food.

Table 1*: *Relevant food classes and subclasses for special purpose foods in the Code

Food class number	Description
13.1	Infant formula products
13.1.1	Special medical purpose product for infants
13.2	Foods for infants
13.3	Formulated meal replacements and formulated supplementary foods

Under food class 13.3 as listed in the table to section S15—5, the Code permits the following food additives:

- Additives permitted at GMP (S16—2)
- Colourings permitted at GMP (S16—3)
- Colourings permitted to a maximum level (S16—4)
- Four intense sweeteners - Acesulphame potassium (INS 950), Alitame (INS 956), Steviol glycosides (INS 960) and Aspartame-acesulphame salt (INS 952).

Substances used as food additives are regulated by Standard 1.1.1 and Standard 1.3.1, with Standard 1.1.2 defining substances '*used as a food additive'.*

Codex Alimentarius

Permissions for food additives listed in CXS 156-1987 refer to the provisions listed in food category 13.1.2 in the *General Standard for Food Additives* (CXS 192-1995) (Codex 1995b). The GSFA provisions are therefore the relevant provisions for young child formula. In addition, CXS 156-1987, Section B (Drink for young children with added nutrients or product for young Children with added nutrients or drink for young children or product for young children) lists certain flavourings that can also be used. Section B of CXS 156-1987 is the only section that is relevant or applicable to Proposal P1066 as the age group is equivalent to the age range for FSFYC.

The GSFA uses a hierarchical food category system, meaning that when an additive is recognised for use in a general category, it is recognised for use in all its sub-categories, unless otherwise stated. Similarly, when an additive is recognised for use in a sub-category, its use is recognised in any further subcategories. However, as no permissions are listed in food category 13.0 and 13.1, the only relevant provisions are listed in Food category 13.1.2 (see Appendix 1).

Codex STAN 192-1995 categories for infant formula differ from the Code as shown below:

Table 2: Relevant food categories for follow-up formula for older infants and product for young Children in the General Standard for Food Additives (GSFA)

Food category number[2]	Description
13.0	Foodstuffs intended for particular nutritional uses
13.1	Infant formula, follow-on formula, and formula for special medical purposes for infants
13.1.1	Infant formula
13.1.2	Follow-up formula

The subcategory 13.1.2 follow-up formula is described as including food intended for use as a liquid part of the complementary feeding of infants (aged at least 6 months) and for young children (aged 1-3 years).

Acidity regulators, antioxidants, emulsifiers, packaging gases and thickeners may be used in foods covered by this standard, provided they comply with Tables 1 and 2 of the General Standard for Food Additives (CXS 192-1995) for food category 13.1.2 (follow-up formula).

The International Numbering System for Food Additives (INS) [3] is intended as a harmonised naming system for food additives, to provide an alternative to the use of specific food additive names. The List of Codex Specifications for Food Additives (CAC/MISC 6-2015) details all the specifications for food additives adopted by reference by Codex. The specifications are prepared by the joint FAO/WHO Expert Committee on Food Additives (JECFA) and published in the Combined Compendium of Food Additive Specifications, FAO JECFA Monograph 1 and subsequent monographs (WHO 2024).

European Union

Several regulations related to food additives exist in the EU. Regulation (EC) 1333/2008 sets the rules on all aspects of food additives: definitions, conditions of use, labelling and procedures (EU 2008). It also contains several annexes outlining the technological functions of food additives and lists food additives approved for use. All food additives must be authorised ensuring that:

- a safety assessment has been performed
- the technological need has been justified
- the use of the additive will not mislead consumers.

Commission Regulation (EU) No 1129/2011[4] provides a Union list of permitted food additive permissions for different food categories in Annex II including follow-on formulas, which is specifically relevant to Proposal P1066 (EU 2011). As young child formula is regulated as a general food in the EU, FSANZ considers the food additive provisions listed in food category 13.1.2 Follow-on formulae, of Annex II are most relevant to Proposal P1066 assessing a special purpose food. These products are targeted at vulnerable subpopulations under

[2] Food category 13.1.2 relates to FOF which is out of scope for P1066.
[3] Refer to Codex Guideline on Class Names and the International Numbering System for Food Additives (CAC/GL 36-1989)
[4] Commission Regulation (EU) No 1129/2011 amending Annex II to Regulation (EC) No 1333/2008 of the European Parliament and of the Council by establishing a Union list of food additives.

Commission Regulation (EU) No 2006/141, where the essential composition of follow-on formulae must satisfy the nutritional requirements of infants in good health as established by generally accepted scientific data.

Commission Regulation (EU) 231/2012 contains the specifications for food additives listed in Annexes II and III to Regulation (EC) 1333/2008 (EU 2012). European regulations refer to E numbers (European food additive numbers) which are essentially the same as the INS used by Codex and in the Code, e.g. phosphoric acid is both E 338 and INS 338.

Table 3: Relevant food categories for Follow-on formulae as defined by EU food additive regulations

Food category number	Description
13.1	Foods for infants and young children
13.1.1	Infant formulae as defined by Commission Directive 2006/141/EC
13.1.2	Follow-on formulae as defined by Directive 2006/141/EC

2.6 Differences in International Numbering System (INS)

The INS incorporates suffix letters such as (i), (ii) and (iii) to differentiate between specific chemical forms or variants of a substance. For instance, INS 500(i) designates sodium carbonate, while INS 500(ii) denotes sodium hydrogen carbonate. These suffixes ensure clarity and accuracy with respect to the JECFA assessment. The Code uses an overarching INS numbering hierarchy and for example, in the instance above, INS 500 will provide permission for both 500(i) and 500(ii).

2.7 Risk management considerations for food additives

In determining the most appropriate risk management approach for food additives in young child formula FSANZ has considered:

- the protection of young child health and safety
- limiting the number of food additives in young child formula to those that are necessary to achieve the required technological functions,
- harmonisation with international standards, where appropriate.

Appendix 1 contains a comparison of permissions for food additives between food class 13.3 - formulated meal replacements and formulated supplementary foods in the Code and CXS 156-1987 (FC 13.1.2. This comparison identified a number of differences between the Code and CXS 156-1987. The additives for which permission differs between the Code and CXS 156-1987 were subject to safety assessment and are listed below in section 2.9.1 below.

FSANZ's proposed risk management approach aligning with CXS 156-1987, relates specifically to the list of food additives in FC 13.1.2 plus the 4 flavours (listed in section 2.10 below) permitted in CXS 156-1987.

2.8 Alignment of food additive permissions

2.8.1 Options for alignment

In developing a new food class to be listed in the table to section S15—5 of the Code, FSANZ will align food additive permissions for young child formula with CXS 156-1987.

FSANZ considered three options for alignment:

1. Incorporating CXS 156-1987 within S15—13.3 of the Code
2. Establishing a new food class S15—13.3.1 Young child formula, under formulated meal replacements and formulated supplementary foods. In doing so, food additive permissions in the 13.3 food class that are not appropriate for young child formula would require a note stating, 'not permitted in young child formula'
3. Establishing a new food class in the table to section S15—5 for young child formula, which would list food additive permissions for young child formula separate to provisions for formulated meal replacements and formulated supplementary foods.

FSANZ considers option 1 would require further assessment to ensure the adoption of CXS 156-1987 food additives were appropriate for use in formulated meal replacements and formulated supplementary foods. Such work is outside the scope of Proposal P1066, hence this option was rejected.

FSANZ determined that option 2 could potentially cause confusion, especially as it would require the inclusion of an accompanying note to prevent hierarchical use which is common within Schedule 15 and therefore this option was also rejected.

FSANZ considers option 3 is the best approach for facilitating regulatory alignment with CXS 156-1987 and for providing regulatory clarity in in relation to the food additive permissions that apply to young child formula.

Question to submitters:

Q3.1 Do you support FSANZ's preferred option (option 3) which proposes establishing a new food class in the table to section S15—5 for young child formula, which would list food additive permissions for young child formula separately to additive permissions for formulated meal replacements and formulated supplementary foods. Please provide justification and any supporting evidence.

Q3.2 FSANZ seeks stakeholder comment, supported by data or other evidence where available, on whether young child formula currently on the Australia and New Zealand market would be disadvantaged from a food technology perspective by alignment with CXS 156-1987 food additive permissions (refer to Table 4 below).

2.8.2 S15—13.3 permissions

At present, food additive permissions for young child formula are regulated under food class 13.3 listed in the table to section S15—5 Formulated meal replacements and formulated supplementary foods. The following food additives are permitted:

- Additives permitted at GMP (S16—2)
- Colourings permitted at GMP (S16—3)
- Colourings permitted to a maximum level (S16—4)
- Intense sweeteners - Acesulphame potassium (INS 950), Alitame (INS 956), Steviol glycosides (INS 960) and Aspartame-acesulphame salt (INS 952).

2.8.3 Flavouring substances

'Permitted flavouring substances' is defined by Standard 1.1.2 as '*a substance that is used as a food additive to perform the technological purpose of a flavouring in accordance with this Code' (*Permitted flavouring substances excluding quinine and caffeine*).

The Code permits flavouring substances in formulated meal replacements and formulated supplementary foods by virtue of their permission in Schedule 16.

Food additive permissions under CXS 156-1987 Section B, include four flavourings; natural fruit extracts, vanilla extract, ethyl vanillin and vanillin. These flavourings must comply with the Guidelines for the Use of Flavourings (CXG 66-2008). There is a note however, that national and/or regional authorities may restrict or prohibit the use of these flavourings.

FSANZ notes these flavourings are already permitted in foods typically consumed by young children. For flavouring agents, JECFA has noted that in most cases dietary exposure to these substances is low and self-limiting, and most flavours are metabolized rapidly to innocuous end-products (WHO 1995). As such, permitting flavourings in young child formula, consistent with existing permissions in Schedule 16 of Code (**Permitted flavouring substances excluding quinine and caffeine*), is unlikely to pose a risk to young children.

2.9 Food additives not permitted in S15—13.3 of the Code

Appendix 1 to this SD contains a comprehensive list of all Schedule 16 additives approved for use, not only in young child formula but many other foods. It also serves to compare the Code's permissions with those of CXS 156-1987.

Granting specific permission for food additives for young child formula products should be accomplished in a way that minimises confusion for both caregivers and manufacturers and allows access to markets in this region, delivering economic advantages. FSANZ considers bringing the permitted food additives for young child formula into alignment with CXS 156-1987 is the most effective way to achieve this goal. Consequently, many of the food additive permissions currently in Schedule 16 will not carry across to young child formula.

The following sections highlight the differences in permissions between CXS 156-1987 and the Code and FSANZ's recommendations to achieve alignment.

2.9.1 Assessment of certain food additives

Seven food additives are permitted by CXS 156-1987 as listed in the GSFA FC 13.1.2 but are not currently permitted within food class 13.3 Formulated meal replacements and formulated supplementary foods listed in the table to section S15—5 (food additives permitted at GMP under Schedule 16).

The food additives are:

- Ascorbyl palmitate (INS 304)
- Ascorbyl stearate (INS 305)
- Potassium hydroxide (INS 525)
- Sodium hydroxide (INS 524)
- d-alpha-Tocopherol (INS 307a)
- Tocopherol concentrate mixed (INS 307b)
- dl-alpha-Tocopherol (INS 307c)

For these 7 additives, FSANZ reviewed the available safety information, including existing safety assessments by JECFA. FSANZ also considered any information on the intake or use levels of the 7 food additives in specific population groups that has been published since the most recent JECFA review, to ensure there were no safety concerns associated with their use.

2.9.1.1 Ascorbyl palmitate (INS 304) and ascorbyl stearate (INS 305)

Ascorbyl palmitate was most recently assessed by JECFA at its 100th meeting in 2025.

JECFA noted new studies showing that ascorbyl palmitate is rapidly and extensively hydrolysed to ascorbic acid and palmitic acid, prior to systemic absorption. Hydrolysis is mediated by carboxylesterases, which are expressed at all ages, although expression is lower in infants than adults. JECFA considered that systemic exposure to ascorbyl palmitate and ascorbyl stearate would be low for all population subgroups. JECFA withdrew the previously established numerical Acceptable Daily Intake (ADI) (0–1.25 mg/kg bw for ascorbyl palmitate or ascorbyl stearate, or the sum of both) and established a group ADI "not specified" for ascorbyl palmitate or ascorbyl stearate, or the sum of both.

FSANZ agrees that an ADI "not specified" is appropriate for ascorbyl palmitate and ascorbyl stearate based on their extensive hydrolysis to ascorbic acid and fatty acids, both common constituents of the diet. A literature search did not identify any new studies that warranted a change to conclusions reached by JECFA at its 100th meeting.

2.9.1.2 Potassium hydroxide (INS 525)

JECFA assessed potassium hydroxide at its ninth meeting in 1965. JECFA concluded that the amounts and concentrations of potassium hydroxide used for pH adjustment (i.e. as an acidity regulator) are not likely to be of any toxicological significance. JECFA assigned an ADI "not limited" provided that the contribution to the dietary load of potassium is assessed and considered to be acceptable. No evidence that the ADI should be altered for potassium hydroxide as a food additive was located in a literature search (PubMed, EBSCO). Zovi and Ferrara (2025) described corrosive damage to tissues in cases in which potassium hydroxide was included as a source of potassium in food supplements mistakenly consumed undiluted, but this risk is not relevant to the use of potassium hydroxide as an acidity regulator because regulation of acidity employs much lower levels of potassium hydroxide. FSANZ agrees an ADI "not limited" is appropriate for potassium hydroxide when used as a food additive, because the concentration required for acidity regulation is not of toxicological significance.

2.9.1.3 Sodium hydroxide (INS 524)

JECFA assessed sodium hydroxide at its ninth meeting in 1965. JECFA concluded that the amounts and concentrations of sodium hydroxide used for pH adjustment are not likely to be of any toxicological significance. JECFA assigned an ADI "not limited" provided that the contribution to the dietary load of sodium is assessed and considered to be acceptable. No evidence that the ADI should be decreased for sodium hydroxide as a food additive (specifically, an acidity regulator) was located by literature search (PubMed, EBSCO). FSANZ agrees an ADI "not limited" is appropriate for sodium hydroxide when used as a food additive, because the concentration required for acidity regulation is not of toxicological significance.

2.9.1.4 d-alpha-Tocopherol (INS 307a), dl-alpha-Tocopherol (INS 307b), and Tocopherol concentrate, mixed (INS 307c)

These are all forms of Vitamin E. Dietary tocopherols are lipid-soluble and are absorbed with fat. In the liver, α-tocopherols are preferentially bound to a transport protein and incorporated into lipoproteins which transport them to other tissues, where they have antioxidant and anti-inflammatory roles. Tocopherols and their metabolites are excreted in faeces and urine (Jiang 2014).

The most recent JECFA evaluation was in 1986. A group ADI of 0.15 to 2 mg/kg bw, was established for dl-alpha-tocopherol and d-alpha-tocopherol concentrate, singly or in combination. The lower value represents the daily dietary allowance recommended by the USA National Academy of Sciences/National Research Council. The lower value of the JECFA group ADI (0.15 mg/kg bw/day) for dl-α-tocopherol and dαtocopherol concentrate was established in the context of vitamin E being an essential nutrient. The upper value (2 mg/kg bw) and was based on human intake experience rather than on a defined toxicological threshold. JECFA noted that an ADI was established despite the toxicological database being less extensive than would normally be required for non-nutrient food additives, and the upper value was designated as a maximum intake considered to be without appreciable health risk (WHO 1986).

No evidence that the ADI should be decreased for tocopherols when used as food additives was located by literature search (PubMed, EBSCO). The adverse effects associated with high-dose supplementation were recently reviewed by Kaye et al. (2025). These effects are not relevant to dietary levels within the group ADI set by JECFA.

2.9.1.5 Conclusion

No toxicological concerns were associated with the use of the 7 assessed food additives in young child formula under the proposed new food class. FSANZ notes that these substances are either common constituents, or rapidly metabolised to common constituents of the diet. The ADIs established by JECFA remain appropriate.

2.9.2 Risk Management of certain food additives

Dependant on market data, FSANZ will consider the inclusion of the 7 assessed food additives in the proposed new food class young child formula. This would bring the Code permissions for these additives into alignment with CXS 156-1987.

Question to submitters:

Q3.3 FSANZ seeks stakeholder comment, supported by data or other evidence where available, on whether the 7 food additives assessed for young child formula (Ascorbyl palmitate (INS 304), Ascorbyl stearate (INS 305), Potassium hydroxide (INS 525), Sodium hydroxide (INS 524), d-alpha-Tocopherol (INS 307a), Tocopherol concentrate mixed (INS 307b) and dl-alpha-Tocopherol (INS 307c)) require permissions in the new proposed food class.

2.10 Alignment of food additive permissions

There is significant overlap in food additive permissions for young child formula between the Code and Codex, although permitted levels may vary (see Appendix 1). Consistent with FSANZ's proposed approach (see subsection 2.6.1) only those food additives permitted by CXS 156-1987 are proposed to be permitted for young child formula in the Code. Table 4

below lists each food additive proposed for inclusion in the new food class, their functional class, current permissions in the Code and the recommended level consistent with CXS 156-1987.

FSANZ notes these food additives have been safely used in various amounts for young child formula such that carrying the permissions over to the new food class does not raise any safety concerns. The majority are also permitted by food class 13.1 infant formula products listed in the table to section S15—5, providing further support for their safety. Furthermore, each food additive has been evaluated by JECFA as being safe for use in young child formula, with each having a numerical ADI or an ADI not specified. As such, FSANZ does not deem it necessary to reassess the safety of food additives listed in Table 4. Table 4 also includes the additional 7 food additives assessed above (see section 2.6) not currently permitted by the Code.

Table 4: Proposed food additive permissions for young child formula

Food additive	Functional Class	Current Code permission in 13.3	Proposed level in new food class to align with GSFA FC 13.1.2
Acetylated distarch adipate (INS 1422)	Emulsifier, Stabiliser, Thickener	GMP	5000 mg/kg
Acetylated distarch phosphate (INS 1414)	Emulsifier, Stabiliser, Thickener	GMP	5000 mg/kg
Ascorbic acid, L (INS 300)	Acidity regulator, Antioxidant, Flour treatment agent, Sequestrant	GMP *May only be used in follow-on formula products*	50 mg/kg
Ascorbyl palmitate (INS 304)	Antioxidant	Not permitted	50 mg/kg
Ascorbyl stearate (INS 305)	Antioxidant	Not permitted	50 mg/kg
Calcium ascorbate (INS 302)	Antioxidant	GMP	50 mg/kg
Calcium hydroxide (INS 526)	Acidity regulator, Firming agent	GMP	GMP
Carbon dioxide (INS 290)	Carbonating agent, Foaming agent, Packaging gas, Preservative, Propellant	GMP	GMP
Carob bean gum (INS 410)	Emulsifier, Gelling agent, Stabiliser, Thickener	GMP *As Locust bean (carob bean) gum*	1000 mg/kg
Carrageenan (INS 407)	Bulking agent, Carrier, Emulsifier, Gelling agent, Glazing agent, Humectant, Stabiliser, Thickener	GMP *For use only in a liquid product*	300 mg/kg
Citric acid (INS 330)	Acidity regulator, Antioxidant, Colour retention agent, Sequestrant	GMP	GMP
Distarch phosphate (INS 1412)	Emulsifier, Stabiliser, Thickener	GMP	5000 mg/kg
Guar gum (INS 412)	Emulsifier, Stabiliser,	GMP *Only in a liquid*	1000 mg/kg

Food additive	Functional Class	Current Code permission in 13.3	Proposed level in new food class to align with GSFA FC 13.1.2
	Thickener	*product that contains hydrolysed protein*	
Gum arabic (Acacia gum) (INS 414)	Bulking agent, Carrier, Emulsifier, Glazing agent, Stabiliser, Thickener	GMP *May only be added as part of a nutrient preparation*	10 mg/kg
Lactic acid, L-, D- and DL- (INS 270)	Acidity regulator	GMP As lactic acid	GMP
Lecithin (INS 322)	Antioxidant, Emulsifier, Flour treatment agent	GMP	5000 mg/kg
Mannitol (INS 421)	Anticaking agent, Bulking agent, Carrier, Humectant, Stabiliser, Sweetener, Thickener	GMP	10 mg/kg
Mono- and di-glycerides of fatty acids (INS 471)	Antifoaming agent, Emulsifier, Glazing agent, Stabiliser	GMP	4000 mg/kg
Nitrogen (INS 941)	Foaming agent, Packaging gas, Propellant	GMP	GMP
Pectins (INS 440)	Emulsifier, Gelling agent, Glazing agent, Stabiliser, Thickener	GMP	10000 mg/kg
Phosphated distarch phosphate (INS 1413)	Emulsifier, Stabiliser, Thickener	GMP *May only be used in:* (a) soy based infant formula product (other than follow-on formula) either singly or in combination with one or more of additives 1412, 1414 and 1440; and (b) soy based follow-on formula either singly or in combination with one or more of additives 1412,1414 and 1422.Other considerations.	5000 mg/kg
Potassium carbonate (INS 501(i))	Acidity regulator	GMP As INS 500	GMP
Potassium hydrogen carbonate (INS 501(ii))	Acidity regulator	GMP As INS 500	GMP
Potassium dihydrogen citrate INS (332(i))	Acidity regulator, Emulsifying salt, Sequestrant, Stabiliser	GMP As INS 332	GMP
Tripotassium citrate (INS 332(ii))	Acidity regulator, Emulsifying salt, Sequestrant, Stabiliser	GMP As INS 332	GMP
Potassium hydroxide (INS 525)	Acidity regulator	Not permitted	GMP

Food additive	Functional Class	Current Code permission in 13.3	Proposed level in new food class to align with GSFA FC 13.1.2
Silicon dioxide, amorphous (INS 551)	Anticaking agent, Antifoaming agent, Carrier	GMP *May only be added as part of a nutrient preparation as silicon dioxide (amorphous)*	10 mg/kg
Sodium ascorbate (INS 301)	Antioxidant, Flour treatment agent	GMP	50 mg/kg
Sodium dihydrogen citrate (monosodium citrate) (INS 331(i))	Acidity regulator, Emulsifier, Emulsifying salt, Sequestrant, Stabiliser	GMP As Sodium citrates INS 331	GMP
Trisodium citrate (INS 331(iii))	Acidity regulator, Emulsifier, Emulsifying salt, Sequestrant, Stabiliser	GMP As Sodium citrates INS 331	GMP
Sodium hydroxide (INS 524)	Acidity regulator	Not permitted	GMP
Starch sodium octenyl succinate (INS 1450)	Carrier, Emulsifier, Stabiliser, Thickener	GMP *May only be added as part of a nutrient preparation as starch sodium octenylsuccinate*	100 mg/kg
Tocopherols (INS 307)			
d-alpha-Tocopherol (INS 307a)	Antioxidant	Not permitted	30 mg/kg
Tocopherol concentrate, mixed (INS 307b)	Antioxidant	Not permitted	30 mg/kg
dl-alpha-Tocopherol (INS 307c)	Antioxidant	Not permitted	30 mg/kg

2.11 Colourings

Table 2 of Appendix 1 summarises the permissions for colourings in the Code under S15—13.3. Colourings are permitted at GMP and to a maximum level. Subsection 1.3.1—4(3) prescribes the maximum level of a colour permitted as follows:

*For a *colouring permitted to a maximum level that is permitted to be *used as a food additive by Schedule 15, the level of all such colours together in a food for sale must be no more than:*

(a) in a beverage—70 mg/L; and
(b) in another food—290 mg/kg.

In contrast, CXS 156 1987 and the EU 2016/127 do not contain provisions for the use of colourings in follow-up formula or products for young children.

The use of additives in foods standardised by Codex is subject to the conditions of use established by the Codex commodity standards and the GSFA, which is considered a single authoritative reference point for food additives. Codex commodity committees have the responsibility and expertise to appraise and justify the technological need for the use of additives. The information given by the commodity committees may also be taken into

account by the Codex Committee on Food Additives (CCFA) when considering food additive provisions in similar non-standardized foods.

Neither the GSFA, CCFA or Codex Committee on Nutrition and Foods for Special Dietary Uses (CCNFSDU) have endorsed or established permissions for use of colourings in products for young children.

Consistent with Codex general principles, ingredients and additives should only be used where there is a clear nutritional or technological justification. In this context, colours provide no nutritional benefit and are typically used to enhance visual appeal, making their use difficult to justify in supplementary special purpose foods for young children.

Based on alignment with CXS 156-1987, FSANZ proposes that colourings shall not be added to the new food class proposed for young child formula.

2.12 Intense sweeteners

Four intense sweeteners are permitted by section S15—13.3 of the Code, however these are not permitted in GSFA FC 13.1.2 with which the new food class will align. These are:

- 950 Acesulphame potassium (500 mg/kg)
- 956 Alitame (85 mg/kg)
- 960 Steviol glycosides (175 mg/kg)
- 962 Aspartame-acesulphame salt (1100 mg/kg)

Internationally, food regulators and public-health authorities take a highly conservative position that intense sweeteners should not be added to foods for infants. The WHO and WHO Europe have explicitly called for the avoidance or banning of added sugars and sweeteners in foods for babies and young children (generally under 3 years) to protect taste development and long-term diet quality (Hardy et al. 2017; WHO 2023). In the EU, this position is implemented through legislation that prohibits sweeteners in foods for infants and young children, regardless of established ADIs for the general population, and is supported by EFSA's recognition of infants as a uniquely vulnerable group. Similarly, WHO guidance on non-sugar sweeteners conclude that such sweeteners should not be given to infants and are strongly discouraged in early childhood, emphasising developmental and public-health considerations rather than acute safety concerns.

Moreover, CXS 156-1987 reinforces this international policy direction by explicitly limiting ingredients that impart or enhance the sweet taste of products intended for young children. (as per section 3.2.4, of Section B of CXS 156-1987). These provisions reflect a deliberate policy intent to minimise exposure to sweetness during early life and are consistent with broader WHO-aligned considerations referenced in the development of the standard.

Codex general principles underpinning the use of ingredients and additives establish that substances should only be used where there is a demonstrated technological or nutritional justification. Within this context, intense sweeteners are inherently characterised by their technological function of imparting high levels of sweetness without contributing nutritional value. Their use is therefore directly inconsistent with the Codex intent to avoid deliberate enhancement of sweet taste in products for young children.

Based on alignment with CXS 156-1987 and the overarching international policy direction, FSANZ proposes that intense sweeteners shall not be added to the new food class proposed for young child formula.

3 Contaminants

Chemical contaminants may be inadvertently present at low concentrations in some foods, including general foods which young children consume. In certain instances, such as with specific metal contaminants that are widespread in the environment, the complete elimination of trace contamination is not feasible. Adhering to the principle of keeping contaminant and natural toxicant levels to As Low As Reasonably Achievable (the ALARA principle) is essential, which forms the basis of the risk management approach for contaminants globally. MLs have been specified in the Code for certain contaminants in general foods to safeguard public health and safety where particular foods are major contributors (i.e. >5%) of total dietary exposure to that contaminant and where adherence to the ML will practically reduce dietary exposure of consumers.

The Code defines a maximum level (ML) as meaning:

> *'the maximum level of a specified contaminant, or specified natural toxicant, which is permitted to be present in a nominated food expressed, unless otherwise specified, in milligrams of the contaminant or the natural toxicant per kilogram of the food (mg/kg).'*

In March 1999, FSANZ reviewed the provisions for Maximum Permitted Concentrations (MPCs[5]) of metal contaminants in food to develop Standard 1.4.1 (ANZFA 1999a, 1999b). The approach agreed to by food ministers was that MLs would be set in the following circumstances:

- only for those contaminants that present a significant risk to public health and safety
- only for those foods that significantly contribute to the dietary exposure of the contaminant
- to ensure that levels are as low as reasonably achievable
- consistent with Codex levels, where possible. However, harmonisation with Codex is secondary to measures put in place to protect the public health and safety of Australians and New Zealanders.

These principles underpin the MLs that are currently in the Code.

3.1 Code requirements

Specific MLs for contaminants in formulated meal replacements or formulated supplementary foods have not been established within Standard 2.9.3. Instead, contaminants in these foods are regulated under the general contaminant framework that applies to all general foods. For these foods the Code presently sets MLs for arsenic, cadmium, lead and mercury, which must be met unless the Code references an alternative ML, such as one set by JECFA or Food Chemicals Codex.

The Code does, however, have established MLs for contaminants in IFP which were developed under Proposal P1028, as shown in table 5 below.

[5] Now known as maximum limits (MLs)

3.2 CXS 156-1987 requirements

The products covered by standard CXS 156-1987 and GSFA FC 13.1.2 are required to meet the MLs of the General Standard for Contaminants and Toxins in Food and Feed (CXS 193-1995) (Codex 1995a). There are no specific contaminant MLs for follow-up formula for older infants and product for young children.

3.3 European Union

In the European Union, food safety regulations for general foods (excluding infant foods) are governed by two main frameworks. Contaminants are regulated under Commission Regulation (EU) 2023/915 (EU 2023), which sets MLs for harmful substances such as mycotoxins, heavy metals, plant toxins, processing contaminants and persistent organic pollutants. These limits are based on the ALARA principle and include rules on sampling, labelling and food mixing. Foods imported into Europe must also comply with these standards.

3.4 Previous considerations by FSANZ

Under Proposal P1028 - Infant Formula, FSANZ developed a preferred strategy for MLs for the thirteen chemical or chemical group contaminants. The current MLs for three contaminants remained unchanged, no MLs were proposed for eight contaminants, and revisions were made to the MLs for aluminium and lead.

Table 5: Contaminant ML adjustments resulting from P1028

Chemical or chemical group contaminants	ML and conditions
Acrylonitrile	No change to the ML of 0.02 mg/L for all foods including infant formula products.
Aluminium	Moved ML from Standard 2.9.1 to Standard 1.4.1 and Schedule 19. Retain single ML of 0.05 mg/100mL for aluminium for IFP including soy-based.
Arsenic	No ML for infant formula products. Monitor and review (for rice that may be used as an ingredient in infant formula).
Cadmium	No ML established
Lead	Lower ML from 0.02 mg/L to 0.01 mg/L in IFP and apply to infant formula on a ready-to-feed basis
Melamine	No ML established
Tin & inorganic tin	No change to the ML of 250 mg/L
Vinyl chloride	No change to the ML of 0.01 mg/L
Aflatoxins B1 and M1	No ML established
Ochratoxin A	No ML established
Polycyclic aromatic hydrocarbons (PAH)	No ML established
Perchlorate	No ML established
Chloropropanol, glycidol and their esters	No ML established

3.5 Discussion

Young child formula and infant formula products share several important compositional and manufacturing similarities. Both product types are typically manufactured using similar base powders and are usually produced within the same manufacturing facilities and production

lines. As commercially produced powdered or ready-to-consume formulations, they also share many technological properties, including similar ingredient matrices, processing conditions and use of food additives.

Given these similarities in both formulation and manufacture, FSANZ considers that young child formula products are likely to contain similar levels of contaminants to infant formula products. The shared ingredient sources and production environments mean that contaminant levels present in raw materials and finished products are likely to be broadly comparable across these product categories.

During P1028, FSANZ undertook a comprehensive review of contaminant MLs applicable to infant formula products. As outlined in Section 3.4, FSANZ assessed the available scientific evidence and retained or established MLs where these were justified to protect infant health while remaining practically achievable. These assessments represent the most recent evaluation of contaminant risks associated with formula products in the Australia and New Zealand context.

In light of the similarities between infant formula products and young child formula, FSANZ considers the contaminant MLs established for infant formula products may also provide an appropriate regulatory benchmark for young child formula. Applying equivalent MLs would support the continued application of the ALARA principle while maintaining a consistent and protective regulatory framework.

However, there are also important contextual differences between the products. Unlike infant formula products, young child formula is not a breast milk substitute and is not intended as the sole source of nutrition. Young child formula is consumed as part of a mixed diet of general foods that also contribute to dietary contaminant exposure. These differences may be relevant when considering the most appropriate regulatory approach for young child formula. FSANZ notes that neither Codex (products covered by CXS 156-1987 shall comply with the maximum levels of the General Standard for Contaminants and Toxins in Food and Feed (CXS 193-1995)) nor the EU currently set MLs specifically for young child formula products.

3.6 Proposed approach

FSANZ proposed approach, noting the similarities between formulation and manufacture of infant formula and young child formula products, is to apply the established MLs for infant formula products to young child formula.

4 Processing aids

4.1 Code requirements

Paragraph 1.1.1—10(6)(c) provides that food for sale cannot contain, as an ingredient or component, a substance ‘used as a processing aid’ unless that substance’s use as a processing aid is expressly permitted by the Code. Section 1.1.2—13 provides that a substance ‘used as a processing aid’ in relation to a food is a substance used during the course of processing that meets all of the following conditions:

- it is used to perform a technological purpose during the course of processing
- it does not perform a technological purpose in the food for sale, and
- it is a substance listed in Schedule 18 or identified in section S16—2 as an additive

permitted at GMP.

Standard 1.3.3 and Schedule 18 list the permitted processing aids for specific technological purposes in relation to:

- if a food is specified—that food; or
- if no food is specified—any food.

All food additives listed in section S16—2 of the Code are generally permitted processing aids due to section 1.3.3—4 of the Code. This means these substances may be used as processing aids in the manufacture of formulated meal replacements and formulated supplementary foods at a level consistent with GMP.

4.2 Proposed approach

Changes to processing aid permissions for formulated meal replacements and formulated supplementary foods are out of scope of this Proposal.

5 Novel food permissions

5.1 Code requirements

Section 1.1.2—8 describes which foods are novel foods for the purposes of the Code. It defines a 'novel food' as a 'non-traditional food' that requires an assessment of public health and safety considerations having regard to:

(a) the potential for adverse effects in humans; or
(b) the composition or structure of the food; or
(c) the process by which the food has been prepared; or
(d) the source from which it is derived; or
(e) patterns and levels of consumption of the food; or
(f) any other relevant matters.

A 'non-traditional' food is defined in the Code as, among other things, a food that does not have a history of human consumption in Australia or New Zealand.

Paragraphs 1.1.1—10(5)(b) and 1.1.1—10(6)(f) provide that, unless expressly permitted by the Code, a food offered for retail sale must not be a novel food or have a novel food as an ingredient or component.

Section 1.5.1—3 provides that the Code permits a food offered for retail sale (other than an infant formula product) to consist or contain a novel food if the novel food is listed in the table to section S25—2 and any associated conditions of use specified in that table are complied with.

The table to section S25—2 (Sale of novel foods) lists permitted novel foods together with their conditions for use including use levels, restrictions on use and labelling requirements, including where added to food for infants and FSFYC.

Novel foods must undergo pre-market assessment and approval by FSANZ before they can be listed in the table to section S25—2.

5.2 Codex

CXS 156-1987 and GSFA FC 13.1.2 have no requirements for novel foods. Both frameworks operate on the basis that ingredients used in young child formula must be safe and suitable for their intended purpose, taking into account the physiological needs of infants and young children. Ingredients are expected to have an established history of safe use or be supported by appropriate scientific evidence demonstrating their safety and suitability for this population.

5.3 Other regulations

In the EU novel foods require premarket approval under Regulation (EU) 2015/2283 before they may be added to or used as food in the EU, including foods for infants and young children (EU 2015).

5.4 Proposed approach

FSANZ's proposed approach is to extend current permissions and conditions of use for novel foods that apply to formulated supplementary foods to young child formula, where appropriate. The addition of novel foods to young child formula through any future approvals would be considered on a case-by-case basis through the application process and based on the outcome of a pre-market safety assessment.

6 Fill of containers

6.1 Current regulations

The Code does not have any specific regulation relating to fill of containers. Standard 1.2.9 – Legibility Requirements, however, includes a clause that indirectly addresses the issue of misleading fill levels. It states that food must not be packaged in a way that is misleading or deceptive, which includes practices like slack fill—where a container is not filled to capacity and the empty space could mislead caregivers about the quantity of food.

CXS 156-1987 has requirements: relating to 'fill of containers', which state:
In the case of products in ready-to-eat form, the fill of container shall be:

(i) not less than 80 percent v/v for products weighing less than 150 g (5 oz);
(ii) not less than 85 percent v/v for products in the weight range 150 g-250 g (5 oz-9 oz); and
(iii) not less than 90 percent v/v for products weighing more than 250 g (9 oz) of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20 °C which the sealed container will hold when completely filled.

In the EU, Directive 76/211/EEC – Making-up by weight or volume of certain pre-packaged products (EU 1976) sets out rules for how pre-packaged products should be filled and labelled, especially those bearing the ℮-mark (also known as the "estimated sign").
Key Provisions are:

- The ℮-mark indicates that the package complies with EU rules on quantity and measurement.
- The average quantity of product in a batch must be equal to or greater than the nominal quantity stated on the label.
- Only a limited proportion of packages may fall below the nominal quantity, within a

defined tolerable negative error.
- The nominal quantity refers only to the product, excluding packaging or accessories.
- The ℮-mark must be placed visibly next to the quantity indication and be at least 3 mm high.

This regulation applies to all foods, not just infant formula products.

6.2 Proposed approach

Although the Code does not have any specific regulation relating to fill of containers, there is regulation in place for misleading or deceptive practices for all foods. Should there be an increase in products conforming to CXS 156-1987 from importation or being manufactured in this region, then alignment with CXS 156-1987could be considered. Since many foods intended for young children differ in format from follow-up formula—such as general foods—FSANZ does not currently regard this as a concern.

FSANZ's proposed approach is to maintain the status quo.

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Appendices

Appendix 1 Comparison of food additive permissions

Table 1: Comparison of food additive (excluding colours) permissions between the Code (S15—13.3) and CXS 156-1987 (GSFA Food category 13.1.2)

Australia New Zealand Food Standards Code (S15—13.3)			Food Additives conforming with CXS 156-1987, GSFA FC 13.1.2			
Food additive name	**INS**	**MPL**	**Food additive name**	**INS**	**MPL**	**Functional class**
Acesulphame potassium	950	500 mg/kg	Acesulfame potassium	950	Not permitted	Flavour enhancer, sweetener
Acetic acid, glacial	260	GMP	Acetic acid, glacial	260	Not permitted	Acidity regulator, Preservative
Acetic and fatty acid esters of glycerol	472a	GMP	Acetic and fatty acid esters of glycerol	472a	Not permitted	Emulsifier, Sequestrant, Stabiliser
Acetylated distarch adipate	1422	GMP	Acetylated distarch adipate	1422	5000 mg/kg	Emulsifier, Stabiliser, Thickener
Acetylated distarch phosphate	1414	GMP	Acetylated distarch phosphate	1414	5000 mg/kg	Emulsifier, Stabiliser, Thickener
Acetylated oxidised starch	1451	GMP	Acetylated oxidised starch	1451	Not permitted	Emulsifier, Stabiliser, Thickener
Acid treated starch	1401	GMP	Acid treated starch	1401	Not permitted	Emulsifier, Stabiliser, Thickener
Adipic acid	355	GMP	Adipic acid	355	Not permitted	Acidity regulator
Advantame	969	GMP	Advantame	969	Not permitted	Flavour enhancer, Sweetener
Agar	406	GMP	Agar	406	Not permitted	Bulking agent, Carrier, Emulsifier, Gelling agent, Glazing agent, Humectant, Stabiliser, Thickener
Alginic acid	400	GMP	Alginic acid	400	Not permitted	Bulking agent, Carrier, Emulsifier, Foaming agent, Gelling agent, Glazing agent, Humectant, Sequestrant, Stabiliser, Thickener
Alitame	956	85 mg/kg	Alitame	956	Not permitted	Sweetener
Alkaline treated starch	1402	GMP	Alkaline treated starch	1402	Not permitted	Emulsifier, Stabiliser, Thickener
Aluminium silicate	559	GMP	Aluminium silicate	559	Not permitted	Anti-caking agent, Clarifying agent

Australia New Zealand Food Standards Code (S15—13.3)			Food Additives conforming with CXS 156-1987, GSFA FC 13.1.2			
Food additive name	**INS**	**MPL**	**Food additive name**	**INS**	**MPL**	**Functional class**
Ammonium acetate	264	GMP	Ammonium acetate	264	Not permitted	Acidity regulator, Raising agent, Preservative
Ammonium alginate	403	GMP	Ammonium alginate	403	Not permitted	Bulking agent, Carrier, Emulsifier, Foaming agent, Gelling agent, Glazing agent, Humectant, Sequestrant, Stabiliser, Thickener
Ammonium carbonates	503	GMP	Ammonium carbonates: Ammonium carbonate Ammonium hydrogen carbonate	503: 503(i) 503(ii)	Not permitted	Acidity regulator, Raising agent
Ammonium chloride	510	GMP	Ammonium chloride	510	Not permitted	Acidity regulator, Flour treatment agent
Ammonium citrates	380	GMP	Triammonium citrate	380	Not permitted	Acidity regulator
Ammonium fumarate	368	GMP	Ammonium fumarate	368	Not permitted	Acidity regulator, Flavour enhancer
Ammonium lactate	328	GMP	Ammonium lactate	328	Not permitted	Flour treatment agent, Stabiliser, Acidity regulator, Flavour enhancer
Ammonium malate	349	GMP	Ammonium malate	349	Not permitted	Stabiliser, Antioxidant, Flavour enhancer
Ammonium phosphates	342	GMP	Ammonium dihydrogen phosphate Diammonium hydrogen	342(i) 342(ii)	Not permitted	Acidity regulator, Flour treatment agent, Raising agent, Stabiliser, Thickener
Ammonium salts of phosphatidic acid	442	GMP	Ammonium salts of phosphatidic acid	442	Not permitted	Emulsifier acid
Arabinogalactan (larch gum)	409	GMP	Arabinogalactan (larch gum)	409	Not permitted	Emulsifier, Stabiliser, Humectant, Texturiser
Ascorbic acid	300	GMP	Ascorbic acid, L-	300	50 mg/kg	Acidity regulator, Antioxidant, Flour treatment agent, Sequestrant
Ascorbyl esters	304, 305	Not permitted	Ascorbyl esters: Ascorbyl palmitate Ascorbyl stearate	304 305	50 mg/kg	Functional Class: Antioxidant

Australia New Zealand Food Standards Code (S15—13.3)			Food Additives conforming with CXS 156-1987, GSFA FC 13.1.2			
Food additive name	**INS**	**MPL**	**Food additive name**	**INS**	**MPL**	**Functional class**
Aspartame (technological use consistent with section 1.3.1—5 only)	951	GMP	Aspartame	951	Not permitted	Flavour enhancer, Sweetener
Aspartame-acesulphame salt	962	1100 mg/kg	Aspartame-acesulfame salt	962	Not permitted	Sweetener
Beeswax, white & yellow	901	GMP	Beeswax	901	Not permitted	Carrier, Emulsifier, Glazing agent, Stabiliser, Thickener
Bentonite	558	GMP	Bentonite	558	Not permitted	Stabiliser and clarifying agent
Bleached starch	1403	GMP	Bleached starch	1403	Not permitted	Emulsifier, Stabiliser, Thickener
Butane (for pressurised food containers only)	943a	GMP	Butane	Not permitted	Not permitted	Propellant
Calcium acetate	263	GMP	Calcium acetate	263	Not permitted	Acidity regulator, Preservative, Stabiliser
Calcium alginate	404	GMP	Calcium alginate	404	Not permitted	Antifoaming agent, Bulking agent, Carrier, Foaming agent, Gelling agent, Glazing agent, Humectant, Sequestrant, Stabiliser, Thickener
Calcium aluminium silicate	556	GMP	Calcium aluminium silicate	Not permitted	Not permitted	Anti-caking agent, Stabiliser
Calcium ascorbate	302	GMP	Calcium ascorbate	302	50 mg/kg	Antioxidant
Calcium carbonates	170	GMP	Calcium carbonates	170(i)	Not permitted	Acidity regulator, Anticaking agent, Colour, Firming agent, Flour treatment agent, Stabiliser
Calcium chloride	509	GMP	Calcium chloride	509	Not permitted	Firming agent, Stabiliser, Thickener
Calcium citrate	333	GMP	Tricalcium citrate	333(iii)	Not permitted	Acidity regulator, Antioxidant, Emulsifying salt, Firming agent, Sequestrant, Stabiliser
Calcium fumarate	367	GMP	Calcium fumarate	367	Not permitted	Acidity regulator, Stabiliser
Calcium gluconate	578	GMP	Calcium gluconate	578	Not permitted	Acidity regulator, Firming agent, Sequestrant
Calcium glutamate, Di-	623	GMP	Calcium glutamate, Di-L-	623	Not	Flavour

Australia New Zealand Food Standards Code (S15—13.3)			Food Additives conforming with CXS 156-1987, GSFA FC 13.1.2			
Food additive name	**INS**	**MPL**	**Food additive name**	**INS**	**MPL**	**Functional class**
L-					permitted	enhancer
Calcium hydroxide	526	GMP	Calcium hydroxide	526	GMP	Acidity regulator, Firming agent
Calcium lactate	327	GMP	Calcium lactate	327	Not permitted	Acidity regulator, Emulsifying salt, Firming agent, Flour treatment agent, Thickener
Calcium lactylates	482	GMP	Calcium stearoyl lactylate	482(i)	Not permitted	Emulsifier, Flour treatment agent, Foaming agent, Stabiliser
Calcium lignosulphonate (40-65)	1522	GMP	Calcium lignosulphonate (40-65)	Not permitted	Not permitted	Carrier, Encapsulating agent, Emulsifier and Stabiliser
Calcium malates	352	GMP	Calcium malate, D, L-	352(ii)	Not permitted	Acidity regulator
Calcium oxide	529	GMP	Calcium oxide	529	Not permitted	Acidity regulator, Flour treatment agent
Calcium phosphates	341	GMP	Calcium dihydrogen phosphate	341(i)	Not permitted	Acidity regulator, Anticaking agent, Emulsifying salt, Firming agent, Flour treatment agent, Humectant, Raising agent, Sequestrant, Stabiliser, Thickener
			Calcium hydrogen phosphate	341(ii)	Not permitted	Acidity regulator, Anticaking agent, Emulsifying salt, Firming agent, Flour treatment agent, Humectant, Raising agent, Stabiliser, Thickener
			Tricalcium phosphate	341(iii)	Not permitted	Acidity regulator, Anticaking agent, Emulsifier, Emulsifying salt, Firming agent, Flour treatment agent, Humectant, Raising agent, Stabiliser,

Australia New Zealand Food Standards Code (S15—13.3)			Food Additives conforming with CXS 156-1987, GSFA FC 13.1.2			
Food additive name	**INS**	**MPL**	**Food additive name**	**INS**	**MPL**	**Functional class**
						Thickener
Calcium silicate	552	GMP	Calcium silicate	552	Not permitted	Anticaking agent
Calcium sulphate	516	GMP	Calcium sulphate	516	Not permitted	Acidity regulator, Colour, Firming agent, Flour treatment agent, Sequestrant, Stabiliser
Calcium tartrate	354	GMP	Calcium tartrate	Not permitted	Not permitted	
Carbon dioxide	290	GMP	Carbon dioxide	290	GMP	Carbonating agent, Foaming agent, Packaging gas, Preservative, Propellant
Carnauba wax	903	GMP	Carnauba wax	903	Not permitted	Acidity regulator, Anticaking agent, Bulking agent, Carrier, Glazing agent
Carrageenan	407	GMP	Carrageenan	407	300 mg/kg	Bulking agent, Carrier, Emulsifier, Gelling agent, Glazing agent, Humectant, Stabiliser, Thickener
Cellulose, microcrystalline and powdered	460	GMP	Microcrystalline cellulose (Cellulose gel)	460(i)	Not permitted	Anticaking agent, Bulking agent, Carrier, Emulsifier, Foaming agent, Glazing agent, Stabiliser, Thickener
			Powdered cellulose	460(ii)	Not permitted	Anticaking agent, Bulking agent, Emulsifier, Glazing agent, Humectant, Stabiliser, Thickener
Citric acid	330	GMP	Citric acid	330	GMP	Acidity regulator, Antioxidant, Colour retention agent, Sequestrant
Citric and fatty acid esters of glycerol	472c	GMP	Citric and fatty acid esters of glycerol	472c	Not permitted	Antioxidant, Emulsifier, Flour treatment agent, Sequestrant, Stabiliser

Australia New Zealand Food Standards Code (S15—13.3)			Food Additives conforming with CXS 156-1987, GSFA FC 13.1.2			
Food additive name	**INS**	**MPL**	**Food additive name**	**INS**	**MPL**	**Functional class**
Cupric sulphate	519	GMP	Cupric sulphate	519	Not permitted	Preservative
Dextrin roasted starch	1400	GMP	Dextrins, roasted starch	1400	Not permitted	Carrier, Emulsifier, Stabiliser, Thickener
Diacetyltartaric and fatty acid esters of glycerol	472e	GMP	Diacetyltartaric and fatty acid esters of glycerol	472e	Not permitted	Emulsifier, Sequestrant, Stabiliser
Disodium guanylate, 5′-	627	GMP	Disodium 5'-guanylate	627	Not permitted	Flavour enhancer
Disodium inosinate, 5′-	631	GMP	Disodium 5'-inosinate	631	Not permitted	Flavour enhancer
Disodium ribonucleotides, 5′-	635	GMP	Disodium 5'-ribonucleotides	635	Not permitted	Flavour enhancer
Distarch phosphate	1412	GMP	Distarch phosphate	1412	5000 mg/kg	Emulsifier, Stabiliser, Thickener
Enzyme treated starches	1405	GMP	Starches, enzyme treated	1405	Not permitted	Emulsifier, Stabiliser, Thickener
Erythorbic acid	315	GMP	Erythorbic Acid (Isoascorbic acid)	315	Not permitted	Antioxidant
Erythritol	968	GMP	Erythritol	968	Not permitted	Flavour enhancer, Humectant, Sweetener
Fatty acid salts of aluminium, ammonia, calcium, magnesium, potassium and sodium	470	GMP	Salts of myristic, palmitic and stearic acids with ammonia, calcium, potassium and sodium	470(i)	Not permitted	Anticaking agent, Emulsifier, Stabiliser
			Salts of oleic acid with calcium, potassium and sodium	470(ii)	Not permitted	Anticaking agent, Emulsifier, Stabiliser
			Magnesium stearate	470(iii)	Not permitted	Anticaking agent, Emulsifier, Thickener
Ferric ammonium citrate	381	GMP	Ferric ammonium citrate	381	Not permitted	Anticaking agent
Ferrous gluconate	579	GMP	Ferrous gluconate	579	Not permitted	Colour retention agent
Fumaric acid	297	GMP	Fumaric acid	297	Not permitted	Acidity regulator
Gellan gum	418	GMP	Gellan gum	418(i)	Not permitted	Gelling agent, Stabiliser, Thickener
Glucono delta-lactone	575	GMP	Glucono delta-lactone	575	Not permitted	Acidity regulator, Raising agent, Sequestrant
Glycerin (glycerol)	422	GMP	Glycerol	422	Not permitted	Humectant, Thickener
Guar gum	412	GMP	Guar gum	412	1000 mg/kg	Emulsifier, Stabiliser, Thickener
Gum arabic (Acacia)	414	GMP	Gum arabic (Acacia gum)	414	10 mg/kg	Bulking agent, Carrier, Emulsifier, Glazing agent,

Australia New Zealand Food Standards Code (S15—13.3)			Food Additives conforming with CXS 156-1987, GSFA FC 13.1.2			
Food additive name	**INS**	**MPL**	**Food additive name**	**INS**	**MPL**	**Functional class**
						Stabiliser, Thickener
Hydrochloric acid	507	GMP	Hydrochloric acid	507	Not permitted	Acidity regulator
Hydroxypropyl cellulose	463	GMP	Hydroxypropyl cellulose	463	Not permitted	Emulsifier, Foaming agent, Glazing agent, Stabiliser, Thickener
Hydroxypropyl distarch phosphate	1442	GMP	Hydroxypropyl distarch phosphate	1442	Not permitted	Anticaking agent, Emulsifier, Stabiliser, Thickener
Hydroxypropyl methylcellulose	464	GMP	Hydroxypropyl methyl cellulose	464	Not permitted	Bulking agent, Emulsifier, Glazing agent, Stabiliser, Thickener
Hydroxypropyl starch	1440	GMP	Hydroxypropyl starch	1440	Not permitted	Emulsifier, Stabiliser, Thickener
Isobutane (for pressurised food containers only)	943b	GMP	Isobutane	943b	Not permitted	Propellant, Extraction solvent
Isomalt	953	GMP	Isomalt (Hydrogenated isomaltulose)	953	Not permitted	Anticaking agent, Bulking agent, Flavour enhancer, Glazing agent, Stabiliser, Sweetener, Thickener
Karaya gum	416	GMP	Karaya gum	416	Not permitted	Emulsifier, Stabiliser, Thickener
L-glutamic acid	620	GMP	Glutamic acid, L(+)-	620	Not permitted	Flavour enhancer
Lactic acid	270	GMP	Lactic acid, L-, D- and DL-	270	GMP	Acidity regulator
Lactic and fatty acid esters of glycerol	472b	GMP	Lactic and fatty acid esters of glycerol	472b	Not permitted	Emulsifier, Sequestrant, Stabiliser
Lactitol	966	GMP	Lactitol	966	Not permitted	Emulsifier, Sweetener, Thickener
Lecithin	322	GMP	Lecithin	322	5000 mg/kg	Antioxidant, Emulsifier, Flour treatment agent
Locust bean (carob bean) gum	410	GMP	Carob bean gum	410	1000 mg/kg	Emulsifier, Gelling agent, Stabiliser, Thickener
Lysozyme	1105	GMP	Lysozyme	1105	Not permitted	Preservative
Magnesium carbonates	504	GMP	Magnesium carbonate	504(i)	Not permitted	Acidity regulator, Anticaking agent, Colour retention agent, Flour treatment

Australia New Zealand Food Standards Code (S15—13.3)			Food Additives conforming with CXS 156-1987, GSFA FC 13.1.2			
Food additive name	**INS**	**MPL**	**Food additive name**	**INS**	**MPL**	**Functional class**
						agent
			Magnesium hydroxide carbonate	504(ii)	Not permitted	Acidity regulator, Anticaking agent, Carrier, Colour retention agent
Magnesium chloride	511	GMP	Magnesium chloride	511	Not permitted	Colour retention agent, Firming agent, Stabiliser
Magnesium glutamate, Di-L-	625	GMP	Magnesium di-L-glutamate	625	Not permitted	Flavour enhancer
Magnesium lactate	329	GMP	Magnesium lactate, DL-	329	Not permitted	Acidity regulator, Flour treatment agent
Magnesium phosphates	343	GMP	Magnesium dihydrogen phosphate	343(i)	Not permitted	Acidity regulator, Anticaking agent, Emulsifying salt, Stabiliser, Thickener
			Magnesium hydrogen phosphate	343(ii)	Not permitted	Acidity regulator, Anticaking agent, Emulsifying salt, Raising agent, Stabiliser, Thickener
			Trimagnesium phosphate	343(iii)	Not permitted	Acidity regulator, Anticaking agent, Stabiliser, Thickener
Magnesium silicates	553	GMP	Magnesium silicate, synthetic	553(i)	Not permitted	Anticaking agent
			Talc	553(iii)	Not permitted	Anticaking agent, Glazing agent, Thickener
Magnesium sulphate	518	GMP	Magnesium sulfate	518	Not permitted	Firming agent, Flavour enhancer
Malic acid	296	GMP	Malic acid, DL-	296	Not permitted	Acidity regulator, Sequestrant
Maltitol & maltitol syrup	965	GMP	Maltitol	965(i)	Not permitted	Bulking agent, Emulsifier, Humectant, Stabiliser, Sweetener, Thickener
			Maltitol syrup	965(ii)	Not permitted	Bulking agent, Emulsifier, Humectant, Stabiliser, Sweetener, Thickener
Mannitol	421	GMP	Mannitol	421	10 mg/kg	Anticaking

Australia New Zealand Food Standards Code (S15—13.3)			Food Additives conforming with CXS 156-1987, GSFA FC 13.1.2			
Food additive name	**INS**	**MPL**	**Food additive name**	**INS**	**MPL**	**Functional class**
						agent, Bulking agent, Carrier, Humectant, Stabiliser, Sweetener, Thickener
Metatartaric acid	353	GMP	Metatartaric acid	353	Not permitted	Stabiliser, Acidity regulator
Methyl cellulose	461	GMP	Methyl cellulose	461	Not permitted	Bulking agent, Emulsifier, Glazing agent, Stabiliser, Thickener
Methyl ethylcellulose	465	GMP	Methyl ethyl cellulose	465	Not permitted	Emulsifier, Foaming agent, Stabiliser, Thickener
Monk fruit extract (luo han guo extract)	N/A	GMP	Monk fruit extract (luo han guo extract)	N/A	Not permitted	Sweetener
Mono- and diglycerides of fatty acids	471	GMP	Mono- and di-glycerides of fatty acids	471	4000 mg/kg	Antifoaming agent, Emulsifier, Glazing agent, Stabiliser
Monoammonium glutamate, L-	624	GMP	Monoammonium L-glutamate	624	Not permitted	Flavour enhancer
Monopotassium glutamate, L-	622	GMP	Monopotassium L-glutamate	622	Not permitted	Flavour enhancer
Monosodium glutamate, L-	621	GMP	Monosodium L-glutamate	621	Not permitted	Flavour enhancer
Monostarch phosphate	1410	GMP	Monostarch phosphate	1410	Not permitted	Emulsifier, Stabiliser, Thickener
Neotame (technological use consistent with section 1.3.1—5 only)	961	GMP	Neotame	961	Not permitted	Flavour enhancer, Sweetener
Nitrogen	941	GMP	Nitrogen	941	GMP	Foaming agent, Packaging gas, Propellant
Nitrous oxide	942	GMP	Nitrous oxide	942	Not permitted	Antioxidant, Foaming agent, Packaging gas, Propellant
Octafluorocyclobutane (for pressurised food containers only)	946	GMP	Octafluorocyclobutane	946	Not permitted	Propellant
Oxidised starch	1404	GMP	Oxidised starch	1404	Not permitted	Emulsifier, Stabiliser, Thickener
Pectins	440	GMP	Pectins	440	10000 mg/kg	Emulsifier, Gelling agent, Glazing agent, Stabiliser, Thickener
Petrolatum (petroleum jelly)	905b	GMP	Petrolatum	905b	Not permitted	Glazing agent, Lubricant, Release agent,Protective coating, Antifoaming

Australia New Zealand Food Standards Code (S15—13.3)			Food Additives conforming with CXS 156-1987, GSFA FC 13.1.2			
Food additive name	**INS**	**MPL**	**Food additive name**	**INS**	**MPL**	**Functional class**
						agent
Phosphated distarch phosphate	1413	GMP	Phosphated distarch phosphate	1413	5000 mg/kg	Emulsifier, Stabiliser, Thickener
Polydextroses	1200	GMP	Polydextroses	1200	Not permitted	Bulking agent, Glazing agent, Humectant, Stabiliser, Thickener
Polydimethylsiloxane	900a	GMP	Polydimethylsiloxane	900a	Not permitted	Anticaking agent, Antifoaming agent, Emulsifier
Polyethylene glycol 8000	1521	GMP	Polyethylene glycol	1521	Not permitted	Antifoaming agent, Carrier, Emulsifier, Glazing agent, Thickener
Polysorbate 80 or Polyoxyethylene (20) sorbitan monooleate	433	GMP	Polyoxyethylene (20) sorbitan monooleate	433	Not permitted	Emulsifier, Stabiliser
Polysorbate 60 or Polyoxyethylene (20) sorbitan monostearate	435	GMP	Polyoxyethylene (20) sorbitan monostearate	435	Not permitted	Emulsifier, Stabiliser
Polysorbate 65 or Polyoxyethylene (20) sorbitan tristearate	436	GMP	Polyoxyethylene (20) sorbitan tristearate	436	Not permitted	Emulsifier, Stabiliser
Polyphosphates	452	GMP	Sodium polyphosphate	452(i)	Not permitted	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabiliser, Thickener
			Potassium polyphosphate	452(ii)	Not permitted	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabiliser, Thickener
			Sodium calcium polyphosphate	452(iii)	Not permitted	Acidity regulator, Emulsifier, Humectant, Raising agent, Sequestrant, Stabiliser
			Calcium polyphosphate	452(iv)	Not permitted	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabiliser, Thickener

Australia New Zealand Food Standards Code (S15—13.3)			Food Additives conforming with CXS 156-1987, GSFA FC 13.1.2			
Food additive name	**INS**	**MPL**	**Food additive name**	**INS**	**MPL**	**Functional class**
			Ammonium polyphosphate	452(v)	Not permitted	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Sequestrant, Stabiliser, Thickener
Potassium acetate or potassium diacetate	261	GMP	Potassium acetate	261(i)	Not permitted	Acidity regulator, Preservative
Potassium adipate (Salt reduced and low sodium foods only)	357	GMP	Potassium adipate	357	Not permitted	Acidity regulator, Preservative
Potassium alginate	402	GMP	Potassium alginate	402	Not permitted	Bulking agent, Carrier, Emulsifier, Foaming agent, Gelling agent, Glazing agent, Humectant, Sequestrant, Stabiliser, Thickener
Potassium ascorbate	303	GMP	Potassium ascorbate	303	Not permitted	Antioxidant
Potassium carbonates	501	GMP	Potassium carbonate	501(i)	GMP	Acidity regulator, Stabiliser
Potassium chloride	508	GMP	Potassium chloride	508	Not permitted	Firming agent, Flavour enhancer, Stabiliser, Thickener
Potassium citrates	332	GMP	Potassium dihydrogen citrate	332(i)	GMP	Acidity regulator, Emulsifying salt, Sequestrant, Stabiliser
			Tripotassium citrate	332(ii)	GMP	Acidity regulator, Antioxidant, Emulsifying salt, Sequestrant, Stabiliser
Potassium fumarate	366	GMP	Potassium fumarate	366	Not permitted	Acidity regulator
Potassium gluconate	577	GMP	Potassium gluconate	577	Not permitted	Acidity regulator, Sequestrant
Potassium hydrogen carbonate	501(ii)	GMP for INS 501, as potassium bicarbonate and potassium carbonate	Potassium hydrogen carbonate	501(ii)	GMP	Acidity regulator, Raising agent, Stabiliser
Potassium hydroxide	525	Not permitted	Potassium hydroxide	525	GMP	Acidity regulator
Potassium lactate	326	GMP	Potassium lactate	326	Not permitted	Acidity regulator,

Australia New Zealand Food Standards Code (S15—13.3)			Food Additives conforming with CXS 156-1987, GSFA FC 13.1.2			
Food additive name	**INS**	**MPL**	**Food additive name**	**INS**	**MPL**	**Functional class**
						Antioxidant, Emulsifier, Humectant
Potassium malates	351	GMP	Potassium malates	Not permitted	Not permitted	Acidity regulator, Antioxidant
Potassium phosphates	340	GMP	Potassium dihydrogen phosphate	340(i)	Not permitted	Acidity regulator, Emulsifier, Humectant, Sequestrant, Stabiliser, Thickener
			Dipotassium hydrogen phosphate	340(ii)	Not permitted	Acidity regulator, Emulsifier, Humectant, Sequestrant, Stabiliser, Thickener
			Tripotassium phosphate	340(iii)	Not permitted	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Sequestrant, Stabiliser, Thickener
Potassium sodium tartrate	337	GMP	Potassium sodium L(+)-tartrate	337	Not permitted	Acidity regulator, Emulsifying salt, Sequestrant, Stabiliser
Potassium sulphate	515	GMP	Potassium sulfate	515(i)	Not permitted	Acidity regulator
Potassium tartrate or Potassium acid tartrate	336	GMP	Potassium tartrate or Potassium acid tartrate	336	Not permitted	Acidity regulator, Stabiliser
Processed eucheuma seaweed	407a	GMP	Processed eucheuma seaweed (PES)	407a	Not permitted	Bulking agent, Carrier, Emulsifier, Gelling agent, Glazing agent, Humectant, Stabiliser, Thickener
Propane (for pressurised food containers only)	944	GMP	Propane	944	Not permitted	Propellant
Propylene glycol	1520	GMP	Propylene glycol	1520	Not permitted	Carrier, Emulsifier, Glazing agent, Humectant
Propylene glycol alginate	405	GMP	Propylene glycol alginate	405	Not permitted	Bulking agent, Carrier, Emulsifier, Foaming agent, Gelling agent, Stabiliser, Thickener
Propylene glycol	477	GMP	Propylene glycol esters	477	Not	Emulsifier

Australia New Zealand Food Standards Code (S15—13.3)			Food Additives conforming with CXS 156-1987, GSFA FC 13.1.2			
Food additive name	**INS**	**MPL**	**Food additive name**	**INS**	**MPL**	**Functional class**
mono- and di-esters or Propylene glycol esters of fatty acids			of fatty acids		permitted	
Pyrophosphates	450	GMP	Disodium diphosphate	450(i)	Not permitted	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabiliser, Thickener
			Trisodium diphosphate	450(ii)	Not permitted	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabiliser, Thickener
			Tetrasodium diphosphate	450(iii)	Not permitted	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabiliser, Thickener
			Magnesium dihydrogen diphosphate	450(ix)	Not permitted	Acidity regulator, Raising agent, Stabiliser
			Tetrapotassium diphosphate	450(v)	Not permitted	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabiliser, Thickener
			Dicalcium diphosphate	450(vi)	Not permitted	Acidity regulator, Emulsifier, Emulsifying salt, Firming agent, Raising agent, Sequestrant, Stabiliser, Thickener
			Calcium dihydrogen diphosphate	450(vii)	Not permitted	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabiliser
Shellac	904	GMP	Shellac, bleached	904	Not	Glazing agent

Australia New Zealand Food Standards Code (S15—13.3)			Food Additives conforming with CXS 156-1987, GSFA FC 13.1.2			
Food additive name	**INS**	**MPL**	**Food additive name**	**INS**	**MPL**	**Functional class**
					permitted	
Silicon dioxide (amorphous)	551	GMP	Silicon dioxide, amorphous	551	10 mg/kg	Anticaking agent, Antifoaming agent, Carrier
Sodium acetates	262	GMP	Sodium acetate	262(i)	Not permitted	Acidity regulator, Preservative, Sequestrant
			Sodium diacetate	262(ii)	Not permitted	Acidity regulator, Preservative, Sequestrant
Sodium alginate	401	GMP	Sodium alginate	401	Not permitted	Bulking agent, Carrier, Emulsifier, Foaming agent, Gelling agent, Glazing agent, Humectant, Sequestrant, Stabiliser, Thickener
Sodium aluminosilicate	554	GMP	Sodium aluminium silicate	554	Not permitted	Anticaking agent
Sodium ascorbate	301	GMP	Sodium ascorbate	301	50 mg/kg	Antioxidant, Flour treatment agent
Sodium carbonates	500	GMP	Sodium carbonate	500(i)	GMP	Acidity regulator, Anticaking agent, Emulsifying salt, Raising agent, Stabiliser, Thickener
			Sodium hydrogen carbonate	500(ii)	GMP	Acidity regulator, Anticaking agent, Raising agent, Stabiliser, Thickener
			Sodium sesquicarbonate	500(iii)	Not permitted	Acidity regulator, Anticaking agent, Raising agent, Stabiliser, Thickener
Sodium carboxymethylcellulose	466	GMP	Sodium carboxymethyl cellulose (Cellulose gum)	466	Not permitted	Bulking agent, Emulsifier, Firming agent, Gelling agent, Glazing agent, Humectant, Stabiliser, Thickener
Sodium citrates	331	GMP	Sodium dihydrogen citrate (monosodium citrate)	331(i)	GMP	Acidity regulator, Emulsifier, Emulsifying salt,

Australia New Zealand Food Standards Code (S15—13.3)			Food Additives conforming with CXS 156-1987, GSFA FC 13.1.2			
Food additive name	**INS**	**MPL**	**Food additive name**	**INS**	**MPL**	**Functional class**
						Sequestrant, Stabiliser
			Trisodium citrate	331(iii)	GMP	Acidity regulator, Emulsifier, Emulsifying salt, Sequestrant, Stabiliser
Sodium erythorbate	316	GMP	Sodium erythorbate (Sodium isoascorbate)	316	Not permitted	Antioxidant
Sodium fumarate	365	GMP	Sodium fumarates	365	Not permitted	Acidity regulator
Sodium gluconate	576	GMP	Sodium gluconate	576	Not permitted	Sequestrant, Stabiliser, Thickener
Sodium hydroxide	524	Not permitted	Sodium hydroxide	524	GMP	Acidity regulator
Sodium lactate	325	GMP	Sodium lactate	325	Not permitted	Acidity regulator, Antioxidant, Bulking agent, Emulsifier, Emulsifying salt, Humectant, Thickener
Sodium lactylates	481	GMP	Sodium stearoyl lactylate	481(i)	Not permitted	Emulsifier, Flour treatment agent, Foaming agent, Stabiliser
Sodium malates	350	GMP	Sodium hydrogen DL-malate	350(i)	Not permitted	Acidity regulator, Humectant
Sodium phosphates	339	GMP	Sodium dihydrogen phosphate	339(i)	Not permitted	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabiliser, Thickener
			Disodium hydrogen phosphate	339(ii)	Not permitted	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Sequestrant, Stabiliser, Thickener
			Trisodium phosphate	339(iii)	Not permitted	Acidity regulator, Emulsifier, Humectant, Preservative, Sequestrant, Stabiliser, Thickener
Sodium sulphates	514	GMP	Sodium sulfate	514(i)	Not permitted	Acidity regulator
			Sodium hydrogen sulfate	514(ii)	Not permitted	Acidity regulator

Australia New Zealand Food Standards Code (S15—13.3)			Food Additives conforming with CXS 156-1987, GSFA FC 13.1.2			
Food additive name	**INS**	**MPL**	**Food additive name**	**INS**	**MPL**	**Functional class**
Sodium tartrate	335	GMP	Sodium L(+)-tartrate	335(ii)	Not permitted	Acidity regulator, Emulsifying salt, Sequestrant, Stabiliser
Sorbitan monostearate	491	GMP	Sorbitan monostearate	491	Not permitted	Emulsifier, Stabiliser
Sorbitan tristearate	492	GMP	Sorbitan tristearate	492	Not permitted	Emulsifier, Stabiliser
Sorbitol/Sorbitol syrup	420	GMP	Sorbitol	420(i)	Not permitted	Bulking agent, Humectant, Sequestrant, Stabiliser, Sweetener, Thickener
			Sorbitol syrup	420(ii)	Not permitted	Bulking agent, Humectant, Sequestrant, Stabiliser, Sweetener, Thickener
Starch acetate	1420	GMP	Starch acetate	1420	Not permitted	Emulsifier, Stabiliser, Thickener
Starch sodium octenylsuccinate	1450	GMP	Starch sodium octenyl succinate	1450	100 mg/kg	Carrier, Emulsifier, Stabiliser, Thickener
Stearic acid	200	GMP	Sorbic acid	200	Not permitted	Preservative
Steviol glycosides	960	175 mg/kg	Steviol glycosides	960	Not permitted	Functional class: Sweetener
Sucralose (technological use consistent with section 1.3.1—5 only)	955	GMP	Sucralose (Trichlorogalactosucrose)	955	Not permitted	Flavour enhancer, Sweetener
Sucrose esters of fatty acids	473	GMP	Sucrose esters of fatty acids	473	Not permitted	Emulsifier, Foaming agent, Glazing agent, Stabiliser
Tara gum	417	GMP	Tara gum	417	Not permitted	Gelling agent, Stabiliser, Thickener
Tartaric acid	334	GMP	L(+)-Tartaric acid	334	Not permitted	Acidity regulator, Antioxidant, Flavour enhancer, Sequestrant
Tartaric, acetic and fatty acid esters of glycerol (mixed)	472f	GMP	Tartaric, acetic and fatty acid esters of glycerol (mixed)	472f	Not permitted	Emulsifier
Thaumatin	957	GMP	Thaumatin	957	Not permitted	Flavour enhancer, Sweetener
d-alpha-Tocopherol	307a	Not permitted	d-alpha-Tocopherol	307a	30 mg/kg	Antioxidant
Tocopherol concentrate, mixed	307b	Not permitted	Tocopherol concentrate, mixed	307b	30 mg/kg	Antioxidant

Australia New Zealand Food Standards Code (S15—13.3)			Food Additives conforming with CXS 156-1987, GSFA FC 13.1.2			
Food additive name	**INS**	**MPL**	**Food additive name**	**INS**	**MPL**	**Functional class**
dl-alpha-Tocopherol	307c	Not permitted	dl-alpha-Tocopherol	307c	30 mg/kg	Antioxidant
Tragacanth gum	413	GMP	Tragacanth gum	413	Not permitted	Emulsifier, Stabiliser, Thickener
Triacetin	1518	GMP	Triacetin	1518	Not permitted	Carrier, Emulsifier, Humectant
Triphosphates	451	GMP	Pentasodium triphosphate	451(i)	Not permitted	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Sequestrant, Stabiliser, Thickener
			Pentapotassium triphosphate	451(ii)	Not permitted	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Sequestrant, Stabiliser, Thickener
Xanthan gum	415	GMP	Xanthan gum	415	Not permitted	Emulsifier, Foaming agent, Stabiliser, Thickener
Xylitol	967	GMP	Xylitol	967	Not permitted	Emulsifier, Humectant, Stabiliser, Sweetener, Thickener
Yeast mannoproteins	455	GMP	Yeast mannoproteins	455	Not permitted	Stabiliser

Table 2*: *Comparison of food additive colours permissions between the Code (S15—13.3) and CXS 156-1987 (GSFA Food category 13.1.2)

Australia New Zealand Food Standards Code	
The following colours are permitted under S15—13.3 so that the level of all such colours together in a food for sale must be no more than: (a) in a beverage—70 mg/L; and (b) in another food—290 mg/kg *No colours are permitted CXS 156-1987 under GSFA FC 13.1.2*	
Food colour name	***INS***
Allura red AC	129
Azorubine / Carmoisine	122
Brilliant black BN	151
Brilliant blue FCF	133
Brown HT	155
Fast green FCF	143
Green S	142
Indigotine	132
Ponceau 4R	124
Quinoline yellow	104
Sunset yellow FCF	110
Tartrazine	102
The following colours are permitted under S15—13.3at GMP by the Code *No colours are permitted by CXS 156-1987 under GSFA FC 13.1.2*	
Food colour name	***INS***
Alkanet (& Alkannin)	103
Anthocyanins	163
Beet Red	162
Caramel I – plain	150a
Caramel II – caustic sulphite process	150b
Caramel III –ammonia process	150c
Caramel IV – ammonia sulphite process	150d
Carotenal, b-apo-8′-	160e
Carotenes	160a
Carotenoic acid, b-apo-8′-, methyl or ethyl esters	160f
Chlorophylls	140
Chlorophylls, copper complexes	141
Cochineal and carmines	120
Curcumins	100
Flavoxanthin	161a
Iron oxides	172
Kryptoxanthin	161c
Lutein	161b
Lycopene	160d
Paprika oleoresins	160c
Rhodoxanthin	161f
Riboflavins	101
Rubixanthan	161d
Saffron, crocetin and crocin	164
Titanium dioxide	171
Vegetable carbon	153
Violoxanthin	161e

Table 3: Flavourings permitted by CXS 156-1987 under FC 13.1.2 (Section B (4.2))

Name of flavouring*	Maximum use level
Natural fruit extracts	GMP
Vanilla extract	GMP
Ethyl vanillin	50 mg/kg
Vanillin	50 mg/kg

* The flavourings used in products covered by this standard should comply with the Guidelines for the Use of Flavourings (CXG 66-2008).15 12) National and/or regional authorities may restrict or prohibit the use of the listed flavourings.