



**FOOD STANDARDS**  
Australia New Zealand  
Te Mana Kounga Kai – Ahitereiria me Aotearoa

**2-04**

**17 March 2004**

## **INITIAL ASSESSMENT REPORT**

### **PROPOSAL P277**

## **REVIEW OF PROCESSING AIDS (OTHER THAN ENZYMES)**

**DEADLINE FOR PUBLIC SUBMISSIONS** to FSANZ in relation to this matter:

**26 May 2004**

*(See 'Invitation for Public Submissions' for details)*

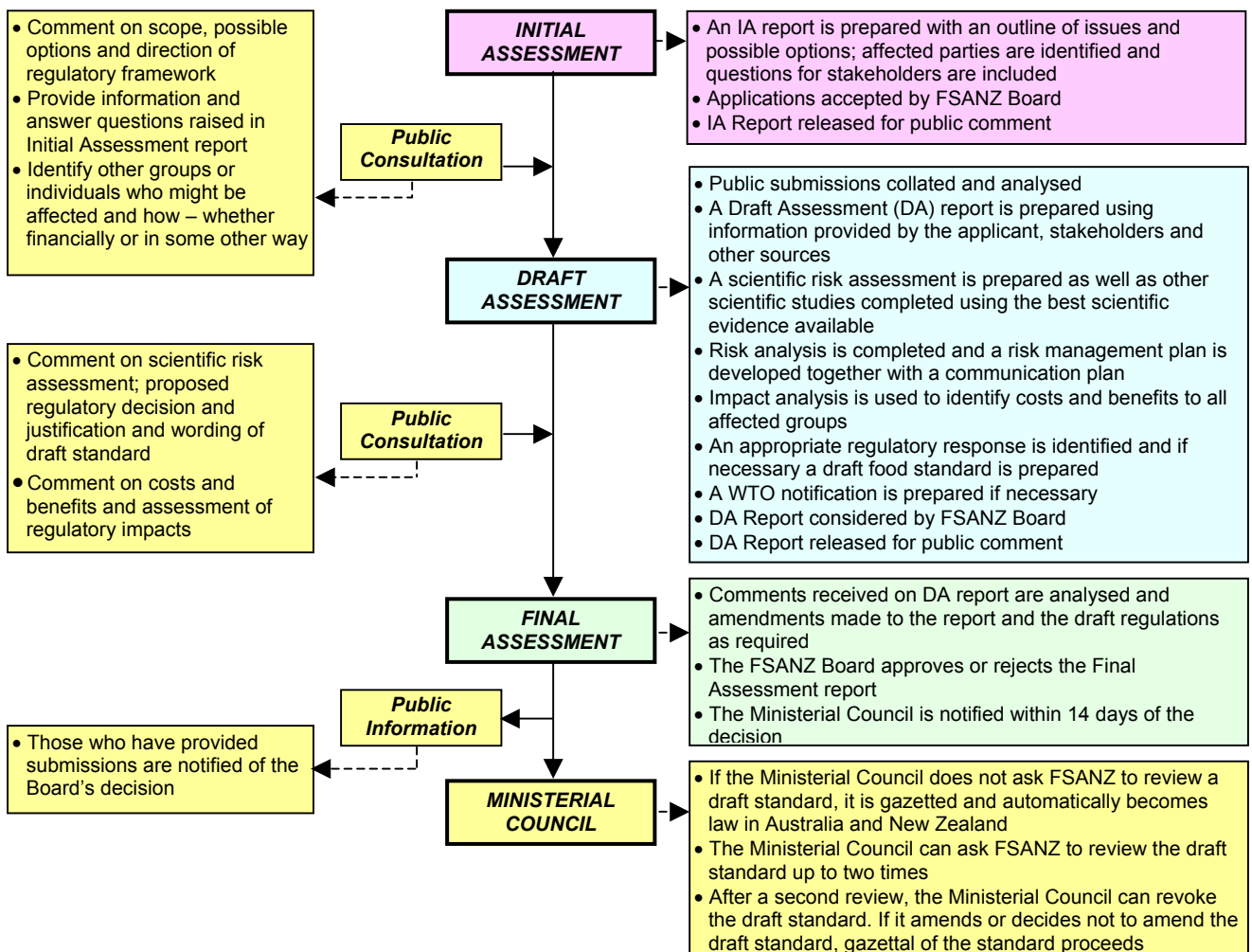
## FOOD STANDARDS AUSTRALIA NEW ZEALAND (FSANZ)

FSANZ’s role is to protect the health and safety of people in Australia and New Zealand through the maintenance of a safe food supply. FSANZ is a partnership between ten Governments: the Commonwealth; Australian States and Territories; and New Zealand. It is a statutory authority under Commonwealth law and is an independent, expert body.

FSANZ is responsible for developing, varying and reviewing standards and for developing codes of conduct with industry for food available in Australia and New Zealand covering labelling, composition and contaminants. In Australia, FSANZ also develops food standards for food safety, maximum residue limits, primary production and processing and a range of other functions including the coordination of national food surveillance and recall systems, conducting research and assessing policies about imported food.

The FSANZ Board approves new standards or variations to food standards in accordance with policy guidelines set by the Australia and New Zealand Food Regulation Ministerial Council (Ministerial Council) made up of Commonwealth, State and Territory and New Zealand Health Ministers as lead Ministers, with representation from other portfolios. Approved standards are then notified to the Ministerial Council. The Ministerial Council may then request that FSANZ review a proposed or existing standard. If the Ministerial Council does not request that FSANZ review the draft standard, or amends a draft standard, the standard is adopted by reference under the food laws of the Commonwealth, States, Territories and New Zealand. The Ministerial Council can, independently of a notification from FSANZ, request that FSANZ review a standard.

The process for amending the *Australia New Zealand Food Standards Code* is prescribed in the *Food Standards Australia New Zealand Act 1991* (FSANZ Act). The diagram below represents the different stages in the process including when periods of public consultation occur. This process varies for matters that are urgent or minor in significance or complexity.



## INVITATION FOR PUBLIC SUBMISSIONS

FSANZ has prepared an Initial Assessment Report of Proposal P277, which includes the identification and discussion of the key issues.

FSANZ invites public comment on this Initial Assessment for the purpose of preparing an amendment to the Code for approval by the FSANZ Board.

Written submissions are invited from interested individuals and organisations to assist FSANZ in preparing the Draft Assessment for this Proposal. Submissions should, where possible, address the objectives of FSANZ as set out in section 10 of the FSANZ Act. Information providing details of potential costs and benefits of the proposed change to the Code from stakeholders is highly desirable. Claims made in submissions should be supported wherever possible by referencing or including relevant studies, research findings, trials, surveys etc. Technical information should be in sufficient detail to allow independent scientific assessment.

The processes of FSANZ are open to public scrutiny, and any submissions received will ordinarily be placed on the public register of FSANZ and made available for inspection. If you wish any information contained in a submission to remain confidential to FSANZ, you should clearly identify the sensitive information and provide justification for treating it as commercial-in-confidence. Section 39 of the FSANZ Act requires FSANZ to treat in-confidence, trade secrets relating to food and any other information relating to food, the commercial value of which would be, or could reasonably be expected to be, destroyed or diminished by disclosure.

Submissions must be made in writing and should clearly be marked with the word 'Submission' and quote the correct project number and name. Submissions may be sent to one of the following addresses:

**Food Standards Australia New Zealand**  
**PO Box 7186**  
**Canberra BC ACT 2610**  
**AUSTRALIA**  
**Tel (02) 6271 2222**  
**[www.foodstandards.gov.au](http://www.foodstandards.gov.au)**

**Food Standards Australia New Zealand**  
**PO Box 10559**  
**The Terrace WELLINGTON 6036**  
**NEW ZEALAND**  
**Tel (04) 473 9942**  
**[www.foodstandards.govt.nz](http://www.foodstandards.govt.nz)**

Submissions should be received by FSANZ **by 26 May 2004**.

Submissions received after this date may not be considered, unless the Project Manager has given prior agreement for an extension.

While FSANZ accepts submissions in hard copy to our offices, it is more convenient and quicker to receive submissions electronically through the FSANZ website using the [Standards Development](#) tab and then through [Documents for Public Comment](#). Questions relating to making submissions or the application process can be directed to the Standards Liaison Officer at the above address or by emailing [slo@foodstandards.gov.au](mailto:slo@foodstandards.gov.au).

Assessment reports are available for viewing and downloading from the FSANZ website. Alternatively, requests for paper copies of reports or other general inquiries can be directed to FSANZ's Information Officer at either of the above addresses or by emailing [info@foodstandards.gov.au](mailto:info@foodstandards.gov.au).

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## Executive Summary

FSANZ has initiated a Proposal, P277 to review Standard 1.3.3 – Processing Aids, excluding enzymes (clauses 15, 16 and 17 of Standard 1.3.3). A concurrent Proposal, P276 – Review of Enzyme Processing Aids, is reviewing the regulation of enzymes.

Standard 1.3.3 was established as a result of Proposal P188 and was gazetted as part of the *Australia New Zealand Food Standards Code* (the Code) on 20 December 2000. Standard 1.3.3 was largely based on Standard A16 of the former Australian *Food Standards Code*, with relevant New Zealand processing aids permissions from the *New Zealand Food Regulations 1984*. Standard 1.3.3 was not reviewed at this time, but the expectation was that it would be, once the Code was implemented in both countries as the sole food regulatory Code.

Standard A16 was formed as a result of Proposal P86, which reviewed the toxicity of processing aids. This Standard was gazetted in the former Australian *Food Standards Code* in April 1996.

It is not the purpose of this Proposal to restructure Standard 1.3.3 in any major way, since the Standard was developed during the course of two earlier proposals. However, this proposal does allow interested parties to provide new scientific evidence regarding the safety of processing aids, make suggestions to correct any errors, review nomenclature, remove duplications and anomalies, improve consistency between this Standard and the rest of the Code and improve the general operation and function of the Standard.

FSANZ seeks comments from interested stakeholders on the following, but not exclusively limited, to:

- new scientific evidence regarding the safety of particular processing aids which may justify amending maximum permitted levels within Standard 1.3.3;
- recent international regulatory changes which may impact on specific processing aids;
- processing aids which are no longer used or likely to be used in the future;
- names of approved processing aids to better reflect current usage and international standards;
- errors and anomalies within the Standard; and
- improvements to make the Standard easier to read and use.

FSANZ will separately approach suitable experts in processing aids and food processing to form an External Advisory Group to assist in this review. It is expected that they will be involved in teleconferences with FSANZ staff to assist in updating the various clauses of the Standard.

This Proposal is prepared in accordance with section 12AA of the FSANZ Act. Written submissions on the Proposal will now be sought.

After public submissions have been received, FSANZ will prepare a Draft Assessment as prescribed in section 15AA of the FSANZ Act.

## 1. Introduction

Standard 1.3.3 – Processing Aids of the Code was largely developed as an inventory of usage in Australia and is based on Standard A16 from the former Australian *Food Standards Code*.

Standard 1.3.3 is proposed to be comprehensively reviewed because the full list of processing aids permissions have not been formally evaluated. Standard 1.3.3 is a joint Australia and New Zealand Standard for processing aids. The Standard was developed during the review of the former Australian *Food Standards Code* and the *New Zealand Food Regulations 1984* to produce the Code which applies to both Australia and New Zealand. New Zealand permissions for processing aids from the *New Zealand Food Regulations 1984* were added without full evaluation or detailed consultation with New Zealand food industry. This review of the processing aids standard was a high priority of the New Zealand government at the time of the review of the two countries' food standards. FSANZ committed to such a review and the FSANZ Board supported the review.

This Proposal is reviewing permissions and evaluating processing aids other than for enzymes in Standard 1.3.3. A separate Proposal, P276 – Review of Enzyme Processing Aids, is currently reviewing approvals and regulation of enzymes. The Initial Assessment Report for Proposal P276 was released in December 2003.

## 2. Regulatory Problem

### 2.1 Current Standard

The regulation of processing aids for all food in the Code is covered by Standard 1.3.3 – Processing Aids. This Standard regulates the use of processing aids in food manufacture, prohibiting their use in food unless there is a specific permission within this Standard. Processing aids are defined in this Standard in clause 1 as:

**processing aid** means a substance listed in clauses 3 to 18, where –

- (a) the substance is used in the processing of raw materials, foods or ingredients, to fulfil a technological purpose relating to treatment or processing, but does not perform a technological function in the final food; and
- (b) the substance is used in the course of manufacture of a food at the lowest level necessary to achieve a function in the processing of that food, irrespective of any maximum permitted level specified.

The various types of processing aids have been grouped into classes and regulated via Tables to clauses 3-18. This Proposal is reviewing all of Standard 1.3.3 excluding clauses 15, 16 and 17 which are permitted enzymes of animal, plant and microbial origin respectively.

Standard 1.3.3 (excluding clauses 15,16 and 17) is included for reference, and to assist people who wish to make public comment on this Proposal, in **Attachment 1** of this Report.

### **3. Objective**

The objective of this Proposal is to ensure that Standard 1.3.3 gives appropriate permissions for processing aids used in Australia and New Zealand and that any residues resulting from the use of processing aids are safe.

In developing or varying a food standard, FSANZ is required by its legislation to meet three primary objectives which are set out in section 10 of the FSANZ Act. These are:

- the protection of public health and safety;
- the provision of adequate information relating to food to enable consumers to make informed choices; and
- the prevention of misleading or deceptive conduct.

In developing and varying standards, FSANZ must also have regard to:

- the need for standards to be based on risk analysis using the best available scientific evidence;
- the promotion of consistency between domestic and international food standards;
- the desirability of an efficient and internationally competitive food industry;
- the promotion of fair trading in food; and
- any written policy guidelines formulated by the Ministerial Council.

The main section 10 objectives that this Proposal will meet are to ensure the protection of public health and safety and that any amendments to the Standard are based on the best available scientific evidence. Other objectives are to ensure consistency, as far as possible, between domestic and international regulations of processing aids. This aims to ensure an efficient and internationally competitive food industry.

### **4. Background**

#### **4.1 Historical Background**

The development of the precursor standard for Standard 1.3.3 - Processing Aids, Standard A16 – Processing Aids of the former Australian *Food Standards Code*, was determined by an earlier Proposal, P86 – Development of a Standard to Regulate the Use of Processing Aids undertaken by the then National Food Authority (NFA). Proposal P86 was considered by the NFA in 1995 and Standard A16 was gazetted in the former Australian *Food Standards Code* in April 1996.

The reasons given by the NFA in April 1996 for the adoption of the new standard to provide permission for the use of processing aids during food processing and production in Australia were:



- processing aids are a special category of food additives which facilitate processing and production but do not perform any function in the final food product;
- traditionally processing aids have not been listed in the former Australian *Food Standards Code* (except in a number of standards such as the standards for alcoholic beverages) and their regulatory status has been uncertain;
- prior to the inception of the NFA, the National Health and Medical Research Council (NHMRC) food committees had commenced work in this area and this proposal is consistent, as far as possible, with the policy adopted in developing the NHMRC Guidelines for Processing Aids;
- a standard for processing aids has been developed in order to ensure that all substances used in the preparation of food are standardised in the Code;
- the standard is intended to maintain public health and safety and all entries in the schedule have undergone an evaluation to ensure that there are no toxicological concerns with permitting their use; and
- the standard is intended to reflect current use and prohibit inappropriate use of processing aids.

A subsequent Proposal by the former Australia New Zealand Food Authority (ANZFA), Proposal P188 – Processing Aids, as part of its review of the Australian *Food Standards Code*, developed Standard 1.3.3 of the Code. The Preliminary Assessment Report for Proposal P188 was released for public comment in October 1998, while the Full Assessment Report was released in August 1999. The Inquiry Report was released in December 1999 and the subsequent Standard, Standard 1.3.3, was gazetted on 20 December 2000 (as part of the *Australia New Zealand Food Standards Code*).

Proposal P86 included a full toxicology evaluation of the processing aids incorporated into Standard A16. The Toxicology Report noted that the majority of processing aids are either not present in the final food or present at such low levels as not to constitute a concern for public health and safety. However, there were a number of processing aids that do leave residues in food or which have a demonstrated toxicity and these were fully evaluated. This was first to ensure they were suitable as food processing aids, and secondly, that the level present in food was safe. This Toxicology Report provided the scientific justifications for maximum residue levels set for processing aids, if they were warranted on toxicity grounds.

The objective of Proposal P188 was to update Standard A16 to recognise current practices in Australia and to take account of New Zealand requirements from the *New Zealand Food Regulations 1984*, in order to implement an *Australia New Zealand Food Standards Code*. There was no comparable standard for processing aids in the *New Zealand Food Regulations 1984*. Processing aids were either regulated as food additives or not specifically regulated. As Standard A16 had only recently been included in the Australian *Food Standards Code*, it was considered that a detailed review for Australia would not be required.

## 5. Relevant Issues

### 5.1 Safety of currently permitted processing aids

One of the objectives of this Proposal is to review the safety of some of the currently approved processing aids.

To identify those processing aids for which a safety review is considered necessary, the following criteria are proposed to be used during the Draft Assessment:

1. the processing aid has not been evaluated by FSANZ/ANZFA/NFA since 1993, and have been (re-)evaluated by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) since 1993; or
2. has been identified by FSANZ as having a potential toxicology concern.

Based on these criteria, FSANZ will assess the safety of the following approved processing aids at Draft Assessment.

- Acetone
- Benzoic acid
- Benzoyl peroxide
- Benzyl alcohol
- Beta-cyclodextrin
- Butane
- 1-Butanol
- Ethyl acetate
- Hexanes
- Isopropyl alcohol
- Methylphenylpolysiloxane
- Mineral oils/ mineral oils based greases/paraffin oil
- Potassium bromate/sodium bromate
- Potassium ethoxide
- Propane
- Silver ions
- Sodium glucoheptonate
- Sodium metabisulphite, sodium sulphite, sulphur dioxide
- Urea

There may be other currently approved processing aids which interested parties believe also need to be re-evaluated from a safety aspect. Submitters should pass to FSANZ any new scientific literature or recent international regulatory restrictions that may impact on Australian and New Zealand regulations. FSANZ would prefer references and reports to be from internationally renowned and peer reviewed scientific literature. Submissions should be sufficiently detailed to allow appropriate consideration.

## 5.2 Removing any obsolete processing aids

One area of particular interest to FSANZ is to remove any reference to processing aids which are no longer used, or not likely to be used, in the food industry in Australia and New Zealand.

## 5.3 Correct errors, remove anomalies and improve consistencies within the Code

It is not anticipated that the structure of Standard 1.3.3 will be changed. This had been resolved during the evolution of the earlier two Proposals, Proposal P86, that developed A16 in the former Australian *Food Standards Code* and Proposal P188 which developed the current Standard 1.3.3 in the Code. Both these Proposals had been undertaken with consultation with various interested parties from the food industries and regulatory agencies. As well there were full rounds of public consultations and many submissions to both Proposals.

However this Proposal does allow interested parties to make suggestions to correct any errors, clarify nomenclature, remove duplications and anomalies, improve consistency between this Standard and the rest of the Code and improve the general operation and function of the Standard.

FSANZ would therefore welcome submissions from interested parties with any comments on how to improve Standard 1.3.3.

This Proposal is not a vehicle to give approvals for new, currently non-approved processing aids. Applicants would still need to make applications to obtain permissions for new processing aids. Information on how to make an application to FSANZ is contained on FSANZ's website at [www.foodstandards.gov.au](http://www.foodstandards.gov.au), specifically at <http://www.foodstandards.gov.au/standardsdevelopment/informationforapplic559.cfm>.

Currently FSANZ has another similar proposal occurring which is reviewing the regulation of enzymes within the Processing Aids standard; that is clauses 15, 16 and 17 of Standard 1.3.3. This concurrent proposal is Proposal P276 – Review of Enzyme Processing Aids. The Initial Assessment Report released for public comment in December 2003.

## 6. Regulatory Options

FSANZ is required to consider the impact of various regulatory (and non-regulatory) options on all sectors of the community, which includes consumers, food industries and governments in Australia and New Zealand. The benefits and costs associated with the proposed amendments to the Code will be analysed using regulatory impact principles.

The following two regulatory options are available for this Proposal.

**Option 1.** Maintain the status quo and not amend Standard 1.3.3.

**Option 2.** Review Standard 1.3.3 and make amendments to the Code as required.

## **7. Impact Analysis**

### **7.1 Affected Parties**

The affected parties to this Proposal are:

- food manufacturers of every category who use processing aids in manufacturing and packaging their food products in Australia and New Zealand;
- consumers of food;
- manufacturers and suppliers of food processing aids; and
- Australian Commonwealth, State, Territory and New Zealand government enforcement agencies.

### **7.2 Impact Analysis**

In the course of developing food regulatory measures suitable for adoption in Australia and New Zealand, FSANZ is required to consider the impact of all options on all sectors of the community, including consumers, the food industry and governments in both countries. The regulatory impact assessment identifies and evaluates, though is not limited to, the costs and benefits of the regulation, and its health, economic and social impacts.

The regulatory impact of this Proposal will be determined at Draft Assessment. To assist in determining this FSANZ would appreciate comments on the possible impacts on stakeholders of this Proposal.

## **8. Consultation**

### **8.1 Public consultation**

FSANZ is seeking public comment in order to assist in performing the Draft Assessment. The Initial Assessment Report is intended to identify the extent of the Proposal and to seek input from interested parties to complete a review of Standard 1.3.3. This report also seeks to highlight specific areas that FSANZ would appreciate submissions from interested stakeholders. Comments on the following topics would be useful:

- new scientific evidence regarding the safety of particular processing aids which may justify amending maximum permitted levels within Standard 1.3.3;
- recent international regulatory changes which may impact on specific processing aids;
- processing aids which are no longer used or likely to be used in the future;
- names of approved processing aids to better reflect current usage and international standards;
- errors and anomalies within the Standard; and
- improvements to make the Standard easier to read and use.

All stakeholders that make a submission to this Proposal will be included on a mailing list to receive notifications of future reports relating to this Proposal. It is also requested that all readers of this Initial Assessment Report pass it to others who they believe will have an interest in it and who may wish to make a submission. It is the aim of FSANZ that wide consultation occur so that all interested stakeholders can make submissions.

There will be a second round of public consultation once the Draft Assessment is performed. The Draft Assessment Report will contain preliminary decisions from the review based on submissions to that stage.

## **8.2 External Advisory Group**

FSANZ will separately approach suitable experts in processing aids and food processing to form an External Advisory Group to assist in this review. It is expected that they will be involved in teleconferences with FSANZ staff to assist in updating the various clauses of the Standard.

## **8.3 World Trade Organization (WTO)**

As members of the World Trade Organization (WTO), Australia and New Zealand are obligated to notify WTO member nations where proposed mandatory regulatory measures are inconsistent with any existing or imminent international standards and the proposed measure may have a significant effect on trade.

There are not any relevant international standards for processing aids and amending the Code to update and improve Standard 1.3.3 – Processing aids after a review, is unlikely to have a significant effect on international trade. This issue will be fully considered at Draft Assessment and, if necessary, notification will be recommended to the agencies responsible in accordance with Australia's and New Zealand's obligations under the WTO Technical Barrier to Trade (TBT) or Sanitary and Phytosanitary Measure (SPS) Agreements. This will enable other WTO member countries to comment on proposed changes to standards where they may have a significant impact on them.

## **9. Conclusion and Recommendation**

This Initial Assessment Report outlines the review of Standard 1.3.3 – Processing Aids (excluding enzymes).

FSANZ seeks submissions from stakeholders to prepare appropriate draft amendments to the Standard, which will be part of the Draft Assessment Report. This report will be circulated for another round of public comment.

FSANZ will also be setting up an external advisory team of suitable experts to assist in the review.

This Proposal is prepared in accordance with section 12AA of the FSANZ Act. Written submissions on the Proposal are now sought.

After public submissions have been received, FSANZ will prepare a Draft Assessment as prescribed in section 15AA of the FSANZ Act.

## **ATTACHMENTS**

1. Attachment 1 - Copy of Standard 1.3.3 – Processing Aids (excluding enzymes, i.e. clauses 15, 16 and 17)

**Copy of Standard 1.3.3 – Processing Aids (excluding enzymes, i.e. clauses 15, 16 and 17)**

***STANDARD 1.3.3***

***PROCESSING AIDS***

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**Purpose**

This Standard regulates the use of processing aids in food manufacture, prohibiting their use in food unless there is a specific permission within this Standard.

Standard 1.3.1 regulates the use of food additives.

**Table of Provisions**

1	Interpretation
2	General prohibition on the use of processing aids
3	Generally permitted processing aids
4	Permitted antifoam agents
5	Permitted catalysts
6	Permitted decolourants, clarifying, filtration and adsorbent agents
7	Permitted desiccating preparations
8	Permitted ion exchange resins
9	Permitted lubricants, release and anti-stick agents
10	Permitted carriers, solvents and diluents
11	Permitted processing aids used in packaged water and in water used as an ingredient in other foods
12	Permitted bleaching agents, washing and peeling agents
13	Permitted extraction solvents
14	Permitted processing aids with miscellaneous functions
15	Permitted enzymes of animal origin
16	Permitted enzymes of plant origin
17	Permitted enzymes of microbial origin
18	Permitted microbial nutrients and microbial nutrient adjuncts

**Clauses**

**1 Interpretation**

In this Standard -

**EC [number]** (Enzyme Commission number) means the number which the Enzyme Commission uses to classify the principal enzyme activity.

**GMP** means Good Manufacturing Practice.

**maximum permitted level** means the maximum amount of the processing aid which may be present in the food as specified in the Schedule.

**processing aid** means a substance listed in clauses 3 to 18, where –

- (a) the substance is used in the processing of raw materials, foods or ingredients, to fulfil a technological purpose relating to treatment or processing, but does not perform a technological function in the final food; and
- (b) the substance is used in the course of manufacture of a food at the lowest level necessary to achieve a function in the processing of that food, irrespective of any maximum permitted level specified.

## 2 General prohibition on the use of processing aids

Unless expressly permitted in this Standard, processing aids must not be added to food.

## 3 Generally permitted processing aids

The following processing aids may be used in the course of manufacture of any food at a level necessary to achieve a function in the processing of that food –

- (a) foods, including water; and
- (b) food additives listed in Schedule 2 of Standard 1.3.1; and
- (c) a processing aid specified in the Table to this clause.

**Table to clause 3**

Activated carbon
Aluminium stearate
Ammonia
Ammonium chloride
Ammonium hydroxide
Bone phosphate
Calcium stearate
Carbon monoxide
Diatomaceous earth
Ethoxylated fatty alcohols
Ethyl alcohol
Fatty acid polyalkylene glycol ester
Furcellaran
Hydrogenated glucose syrups
Isopropyl alcohol
Kaolin
Magnesium hydroxide
Magnesium stearate
Oleic acid
Oleyl oleate
Oxygen
Perlite
Phospholipids
Phosphoric acid
Polyethylene glycols



Polyglycerol esters of fatty acids
Polyglycerol esters of interesterified ricinoleic acid
Polyoxyethylene 40 monostearate
Polypropylene glycol alginate
Potassium hydrogen tartrate
Potassium hydroxide
Potassium oleate
Potassium stearate
Silicates
Sodium ethoxide
Sodium hydroxide
Sodium lauryl sulphate
Sodium methoxide
Sulphuric acid
Tannic acid
White mineral oil

**Editorial note:**

‘Silicates’ include, but are not limited to, calcium aluminium silicate, calcium silicate, magnesium silicate, sodium aluminosilicate, sodium calcium polyphosphate silicate, sodium hexafluorosilicate, sodium metasilicate and sodium silicate.

**4 Permitted antifoam agents**

The processing aids listed in the Table to this clause may be used as an antifoam agent in the course of manufacture of any food provided the final food contains no more than the corresponding maximum permitted level specified in the Table.

**Table to clause 4**

Substance	Maximum permitted level (mg/kg)
Butanol	10
Dimethylpolysiloxane	10
Methylphenylpolysiloxane	10
Oxystearin	GMP
Polyethylene glycol dioleate	GMP
Polyethylene/ polypropylene glycol copolymers	GMP
Polysorbate 60	GMP
Polysorbate 65	GMP
Polysorbate 80	GMP
Soap	GMP
Sorbitan monolaurate	1
Sorbitan monooleate	1

**5 Permitted catalysts**

The processing aids listed in the Table to this clause may be used as a catalyst in the course of manufacture of any food provided the final food contains no more than the corresponding maximum permitted level specified in the Table.

**Table to clause 5**

Substance	Maximum permitted level (mg/kg)
Chromium	0.1
Copper	0.1
Molybdenum	0.1
Nickel	1.0
Peracetic acid	0.7
Potassium ethoxide	1.0
Potassium (metal)	GMP
Sodium (metal)	GMP

## 6 Permitted decolourants, clarifying, filtration and adsorbent agents

The processing aids listed in the Table to this clause may be used as decolourants, clarifying, filtration and adsorbent agents in the course of manufacture of any food provided the final food contains no more than the corresponding maximum permitted level specified in the Table.

**Table to clause 6**

Substance	Maximum permitted level (mg/kg)
Acid clays of montmorillonite	GMP
Chloromethylated aminated styrene-divinylbenzene resin	GMP
Copper sulphate	GMP
Dimethylamine-epichlorohydrin copolymer	150
Dimethyldialkylammonium chloride	GMP
Divinylbenzene copolymer	GMP
High density polyethylene co-extruded with kaolin	GMP
Iron oxide	GMP
Fish collagen, including Isinglass	GMP
Magnesium oxide	GMP
Modified polyacrylamide resins	GMP
Nylon	GMP
Phytates (including phytic acid, magnesium phytate & calcium phytate)	GMP
Polyester resins, cross-linked	GMP
Polyethylene	GMP
Polypropylene	GMP
Polyvinyl polypyrrolidone	100
Potassium ferrocyanide	0.1

## 7 Permitted desiccating preparations

The processing aids listed in the Table to this clause may be used as desiccating preparations in the course of manufacture of any food provided the final food contains no more than the corresponding maximum permitted level specified in the Table.

**Table to clause 7**

Substance	Maximum permitted level (mg/kg)
Aluminium sulphate	GMP
Ethyl esters of fatty acids	GMP
Short chain triglycerides	GMP
Sodium stearyl lactylate	GMP

## 8 Permitted ion exchange resins

The processing aids listed in the Table to this clause may be used as an ion exchange resin in the course of manufacture of any food provided the final food contains no more than the corresponding maximum permitted level specified in the Table.

**Table to clause 8**

Substance	Maximum permitted level (mg/kg)
Completely hydrolysed copolymers of methyl acrylate and divinylbenzene	GMP
Completely hydrolysed terpolymers of methyl acrylate, divinylbenzene and acrylonitrile	GMP
Cross-linked phenol-formaldehyde activated with one or both of the following: triethylene tetramine and tetraethylenepentamine	GMP
Cross-linked polystyrene, chloromethylated, then aminated with trimethylamine, dimethylamine, diethylenetriamine, or dimethylethanolamine	GMP
Diethylenetriamine, triethylene-tetramine, or tetraethylenepentamin cross-linked with epichlorohydrin	GMP
Divinylbenzene copolymer	GMP
Epichlorohydrin cross-linked with ammonia	GMP
Epichlorohydrin cross-linked with ammonia and then quaternised with methyl chloride to contain not more than 18% strong base capacity by weight of total exchange capacity	GMP
Hydrolysed copolymer of methyl acrylate and divinylbenzene	GMP
Methacrylic acid-divinylbenzene copolymer	GMP
Methyl acrylate-divinylbenzene copolymer containing not less than 2% by weight of divinylbenzene, aminolysed with dimethylaminopropylamine	GMP
Methyl acrylate-divinylbenzene copolymer containing not less than 3.5% by weight of divinylbenzene, aminolysed with dimethylaminopropylamine	GMP
Methyl acrylate-divinylbenzene-diethylene glycol divinyl ether terpolymer containing not less than 3.5% by weight divinylbenzene and not more than 0.6% by weight of diethylene glycol divinyl ether, aminolysed with dimethaminopropylamine	GMP
Methyl acrylate-divinylbenzene-diethylene glycol divinyl ether terpolymer containing not less than 7% by weight divinylbenzene and not more than 2.3% by weight of diethylene glycol divinyl ether, aminolysed with dimethaminopropylamine and quaternised with methyl chloride	GMP
Reaction resin of formaldehyde, acetone, and tetraethylenepentamine	GMP
Regenerated cellulose, cross-linked and alkylated with epichlorohydrin and propylene oxide, then derivatised with carboxymethyl groups whereby the amount of epichlorohydrin plus propylene oxide does not exceed 70% of the starting quantity of cellulose	GMP

**Table to clause 8 (continued)**

Substance	Maximum permitted level (mg/kg)
Regenerated cellulose, cross-linked and alkylated with epichlorohydrin and propylene oxide, then derivatised with tertiary amine groups whereby the amount of epichlorohydrin plus propylene oxide does not exceed 70% of the starting quantity of cellulose	GMP
Regenerated cellulose, cross-linked and alkylated with epichlorohydrin and propylene oxide, then derivatised with quaternary amine groups whereby the amount of epichlorohydrin plus propylene oxide does not exceed 250% of the starting quantity of cellulose	GMP
Regenerated cellulose, cross-linked and alkylated with epichlorohydrin and propylene oxide, then sulphonated, whereby the amount of epichlorohydrin plus propylene oxide employed does not exceed 250% of the starting quantity of cellulose	GMP
Styrene-divinylbenzene cross-linked copolymer, chloromethylated then aminated with dimethylamine and oxidised with hydrogen peroxide whereby the resin contains not more than 15% of vinyl N,N-dimethylbenzylamine-N-oxide and not more than 6.5% of nitrogen	GMP
Sulphite-modified cross-linked phenol-formaldehyde, with modification resulting in sulphonic acid groups on side chains	GMP
Sulphonated anthracite coal	GMP
Sulphonated copolymer of styrene and divinylbenzene	GMP
Sulphonated terpolymers of styrene, divinylbenzene, and acrylonitrile or methyl acrylate	GMP
Sulphonated tetrapolymer of styrene, divinylbenzene, acrylonitrile, and methyl acrylate derived from a mixture of monomers containing not more than a total of 2% by weight of acrylonitrile and methyl acrylate	GMP

## 9 Permitted lubricants, release and anti-stick agents

The processing aids listed in the Table to this clause may be used as lubricants, release and anti-stick agents in the course of manufacture of any food provided the final food contains no more than the corresponding maximum permitted level specified in the Table.

**Table to clause 9**

Substance	Maximum permitted level (mg/kg)
Acetylated mono- and diglycerides	100
Mineral oil based greases	GMP
Polysorbate 60	GMP
Sodium stearyl lactate	GMP
Talc	GMP
Thermally oxidised soya-bean oil	320

## 10 Permitted carriers, solvents and diluents

The processing aids listed in the Table to this clause may be used as carriers, solvents and diluents in the course of manufacture of any food provided the final food contains no more than the corresponding maximum permitted level specified in the Table.

**Table to clause 10**

Substance	Maximum permitted level (mg/kg)
Anhydrous sodium sulphate	GMP
Benzyl alcohol	500
Croscarmellose sodium	GMP
Ethyl acetate	GMP
Ethyl alcohol	GMP
Glycerol diacetate	GMP
Glyceryl monoacetate	GMP
Glycine	GMP
Isopropyl alcohol	1000
L-Leucine	GMP
Talc	GMP
Triethyl citrate	GMP

### 11 Permitted processing aids used in packaged water and in water used as an ingredient in other foods

The processing aids listed in the Table to this clause may be used in the course of manufacture of packaged water and in water used as an ingredient in other foods provided the final food contains no more than the corresponding maximum permitted level specified in the Table.

**Table to clause 11**

Substance	Maximum permitted level (mg/kg)
Aluminium sulphate	GMP
Ammonium sulphate	GMP
Calcium hypochlorite	10 (available chlorine)
Calcium sodium polyphosphate	GMP
Chlorine	10 (available chlorine)
Chlorine dioxide	10 (available chlorine)
Cobalt sulphate	GMP
Copper sulphate	GMP
Cross-linked phenol-formaldehyde activated with one or both of triethylenetetramine or tetraethylenepentamine	GMP
Cross-linked polystyrene, first chloromethylated then aminated with trimethylamine, dimethylamine, diethylenetriamine or dimethylethanolamine	GMP
Diethylenetriamine, triethylenetetramine or tetraethylenepentamine cross-linked with epichlorohydrin	GMP
Ferric chloride	GMP
Ferric sulphate	GMP
Ferrous sulphate	GMP
Hydrofluorosilic acid (fluorosilic acid)	GMP
Hydrolyzed copolymers of methyl acrylate and divinylbenzene	GMP
Hydrolyzed terpolymers of methyl acrylate, divinylbenzene and acrylonitrile	GMP
Hydrogen peroxide	5
1-Hydroxyethylidene-1,1-diphosphonic acid	GMP
Lignosulphonic acid	GMP
Magnetite	GMP
Maleic acid polymers	GMP

**Table to clause 11 (continued)**

Substance	Maximum permitted level (mg/kg)
Methyl acrylate-divinylbenzene copolymer containing not less than 2% divinylbenzene aminolysed with dimethylaminopropylamine	GMP
Methacrylic acid-divinylbenzene copolymer	GMP
Methyl acrylate-divinylbenzene-diethylene glycol divinyl ether terpolymer containing not less than 3.5% divinylbenzene and not more than 0.6% diethylene glycol divinyl ether, aminolysed with dimethylaminopropylamine	GMP
Modified polyacrylamide resins	GMP
Monobutyl ethers of polyethylene-polypropylene glycol	GMP
Ozone	GMP
Phosphorus acid	GMP
Polyaluminium chloride	GMP
Polydimethyldiallyl ammonium chloride	GMP
Polyelectrolytes (acrylamide monomers)	GMP
Polyoxypropylene glycol	GMP
Potassium permanganate	GMP
Reaction resin of formaldehyde, acetone and tetraethylenepentamine	GMP
Regenerated cellulose, cross-linked and alkylated with epichlorohydrin and propylene oxide, then sulphonated whereby the amount of epichlorohydrin plus propylene oxide employed does not exceed 250% of the starting quantity of cellulose	GMP
Silver ions	0.01
Sodium aluminate	GMP
Sodium fluoride	GMP
Sodium fluorosilicate (Sodium silicofluoride)	GMP
Sodium fumarate	GMP
Sodium glucoheptonate	1 (measured as cyanide)
Sodium gluconate	GMP
Sodium hypochlorite	10 (available chlorine)
Sodium lignosulphonate	GMP
Sodium metabisulphite	GMP
Sodium nitrate	GMP
Sodium polymethacrylate	2.5
Sodium sulphite (neutral or alkaline)	GMP
Styrene-divinylbenzene cross-linked copolymer	GMP
Sulphonated copolymer of styrene and divinylbenzene	GMP
Sulphonated terpolymers of styrene, divinylbenzene acrylonitrile and methyl acrylate	GMP
Sulphite modified cross-linked phenol-formaldehyde	GMP
Tannin powder extract	GMP
Tetrasodium ethylene diamine tetraacetate	GMP
Zinc sulphate	GMP

## **12 Permitted bleaching agents, washing and peeling agents**

The processing aids listed in the Table to this clause may be used as bleaching agents, washing and peeling agents in the course of manufacture of the corresponding foods specified in the Table provided the final food contains no more than the corresponding maximum permitted level specified in the Table.

**Table to clause 12**

Substance	Food	Maximum permitted level (mg/kg)
Benzoyl peroxide	All foods	40 (measured as benzoic acid)
Bromo-chloro-dimethylhydantoin	All foods	1.0 (available chlorine) 1.0 (inorganic bromide) 2.0 (dimethylhydantoin)
Calcium hypochlorite	All foods	1.0 (available chlorine)
Chlorine	All foods	1.0 (available chlorine)
Chlorine dioxide	All foods	1.0 (available chlorine)
Diammonium hydrogen orthophosphate	All foods	GMP
2-Ethylhexyl sodium sulphate	All foods	0.7
Hydrogen peroxide	All foods	5
Oxides of nitrogen	All foods	GMP
Ozone	All foods	GMP
Peracetic acid	All foods	GMP
Sodium chlorite	All foods	1.0 (available chlorine)
Sodium dodecylbenzene sulphonate	All foods	0.7
Sodium hypochlorite	All foods	1.0 (available chlorine)
Sodium laurate	All foods	GMP
Sodium metabisulphite	Root and tuber vegetables	25
Sodium peroxide	All foods	5
Sodium persulphate	All foods	GMP
Triethanolamine	Dried vine fruit	GMP

### 13 Permitted extraction solvents

The processing aids listed in the Table to this clause may be used as extraction solvents in the course of manufacture of the corresponding foods specified in the Table provided the final food contains no more than the corresponding maximum permitted level specified in the Table.

**Table to clause 13**

Substance	Food	Maximum permitted level (mg/kg)
Acetone	Flavourings	2
	Other foods	0.1
Benzyl alcohol	All foods	GMP
Butane	Flavourings	1
	Other foods	0.1
Butanol	All foods	10
Cyclohexane	All foods	1
Dibutyl ether	All foods	2
Diethyl ether	All foods	2
Ethyl acetate	All foods	10
Glyceryl triacetate	All foods	GMP
Hexanes	All foods	20
Isobutane	Flavourings	1
	Other foods	0.1
Methanol	All foods	5
Methylene chloride	Decaffeinated coffee	2
	Decaffeinated tea	2
	Flavourings	2

**Table to clause 13 (continued)**

Substance	Food	Maximum permitted level (mg/kg)
Methylethyl ketone	All foods	2
Propane	All foods	1
Toluene	All foods	1
Trichloroethylene	All foods	2

#### 14 Permitted processing aids with miscellaneous functions

The processing aids listed in the Table to this clause may be used for the corresponding function specified in the Table, provided the final food contains no more than the corresponding maximum permitted level specified in the Table.

**Editorial note:**

Where meat has been treated using lactoperoxidase the mandatory labelling requirements in clause 4 of Standard 1.2.3 apply.

**Table to clause 14**

Substance	Function	Maximum permitted level (mg/kg)
Ammonium persulphate	Yeast washing agent	GMP
Ammonium sulphate	Decalcification agent for edible casings	GMP
β-Cyclodextrin	Used to extract cholesterol from eggs	GMP
Butanol	Suspension agent for sugar crystals	10
Carbonic acid	Bleached tripe washing agent	GMP
Cetyl alcohol	Coating agent on meat carcasses and primal cuts to prevent desiccation	1.0
Ethyl acetate	Cell disruption of yeast	GMP
Ethylene diamine tetraacetic acid	Metal sequestrant for edible fats and oils and related products	GMP
Ethylene Oxide  This permission ceases to have effect on 30 September 2003. This permission is an Australia Only Standard. Subclauses 1(2), 1(3) and 1(4) of Standard 1.1.1 do not apply to this permission	Sterilisation of herbs, spices, and dried vegetables used as seasonings – herbs, spices, and dried vegetables used as seasonings sterilised by the application of ethylene oxide may only be sold or imported into Australia 21 days after such sterilisation	20
Gibberellic acid	Barley germination	GMP
Gluteral	Manufacture of edible collagen casings	GMP
Hydrogen peroxide	Inhibiting agent for dried vine fruits, fruit and vegetable juices, sugar, vinegar and yeast autolysate	5
	Removal of glucose from egg products	5



**Table to clause 14 (continued)**

Substance	Function	Maximum permitted level (mg/kg)
	Removal of sulphur dioxide	5
Indole acetic acid	Barley germination	GMP
Lactoperoxidase from bovine milk EC [1.11.1.7]	Reduce and/or inhibit bacterial population on meat surfaces	GMP
L-Cysteine (or HCl salt)	Dough conditioner	75
Morpholine	Solubilising agent for coating mixtures on fruits	GMP
Oak chips	For use in the manufacture of wine	GMP
Paraffin	Coatings for cheese and cheese products	GMP
Polysorbate 80	Manufacture of edible collagen casings	GMP
Polyvinyl acetate	Preparation of waxes for use in cheese and cheese products	GMP
Potassium bromate	Germination control in malting	0.1
Sodium bromate	Germination control in malting	0.1
Sodium gluconate	Denuding, bleaching & neutralising tripe	GMP
Sodium glycerophosphate	Cryoprotectant for starter culture	GMP
Sodium metabisulphite	Dough conditioner	60
	Removal of excess chlorine	60
	Softening of corn kernels for starch manufacture	60 (in the starch)
	Treatment of hides for use in gelatine and collagen manufacture	GMP
Sodium sulphide	Treatment of hides for use in gelatine and collagen manufacture	GMP
Sodium sulphite	Dough conditioner	60
Sodium thiocyanate	Reduce and/or inhibit bacterial population on meat surfaces	GMP
Stearyl alcohol	Coating agent on meat carcasses and primal cuts to prevent desiccation	GMP
Sulphur dioxide	Control of nitrosodimethylamine in malting	750
	Treatment of hides for use in gelatine and collagen manufacture	750
Sulphurous acid	Softening of corn kernels	GMP
	Treatment of hides for use in gelatine and collagen manufacture	GMP
Triethanolamine	Solubilising agent for coating mixtures for fruits	GMP
Urea	Manufacture of concentrated gelatine solutions	1.5 times the mass of the gelatine present
Woodflour from untreated <i>Pinus radiata</i>	Gripping agent used in the treatment of hides	GMP

## 18 Permitted microbial nutrients and microbial nutrient adjuncts

The processing aids listed in the Table to this clause may be used as microbial nutrients or microbial nutrient adjuncts in the course of manufacture of any food.

**Table to clause 18**

Adenine	Manganese chloride
Adonitol	Manganese sulphate
Ammonium sulphate	Niacin
Arginine	Nitric acid
Asparagine	Pantothenic acid
Aspartic acid	Peptone
Benzoic acid	Phytates
Biotin	Polysorbate 80
Calcium pantothenate	Polyvinylpyrrolidone
Calcium propionate	Pyridoxine hydrochloride
Copper sulphate	Riboflavin
Cystine	Sodium formate
Cysteine monohydrochloride	Sodium molybdate
Dextran	Sodium tetraborate
Dextrin	Thiamin
Ferrous sulphate	Threonine
Glutamic acid	Trehalose
Glycine	Uracil
Guanine	Urea
Histidine	Xanthine
Hydroxyethyl starch	Zinc chloride
Inosine	Zinc sulphate
Inositol	