STANDARD 4.5.1

WINE PRODUCTION REQUIREMENTS

(Australia only)

Purpose

This Standard includes requirements for the production of wine in Australia only.

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Schedule Specifications for the Purposes of this Standard

Clauses

1 Interpretation

In this Standard –

- **brandy** means the spirit obtained by the distillation of wine in such a manner as to ensure that the spirit possesses the taste, aroma and other characteristics generally attributed to brandy, in accordance with the requirements set out in the Schedule to this Standard.
- fortified wine means the product consisting of wine to which has been added grape spirit, brandy or both.
- **grape spirit** means the spirit obtained from the distillation of wine or the by-products of wine making or the fermented liquor of a mash of dried grapes and contains methanol in a proportion not exceeding 3 g/L at 20°C of the ethanol content.
- **sparkling wine** means the product consisting of wine that by complete or partial fermentation of contained sugars has become surcharged with carbon dioxide.
- **wine** means the product of the complete or partial fermentation of fresh grapes, or a mixture of that product and products derived solely from grapes.

2 Application

This Standard applies to the production of wine in Australia only, notwithstanding any provisions to the contrary elsewhere in this Code.

3 Substances used in production

(1) Subject to any limits imposed by clause 5 of this Standard, any of the substances specified in the Table to this clause may be used in the production of wine, sparkling wine or fortified wine.

(2) In this clause –

mistelle means grape must or grape juice prepared from fresh grapes to which grape spirit has been added to prevent fermentation and which has an ethanol content between 120 mL/L and 150 mL/L at 20°C.

Additive				
Additive				
Ascorbic acid				
Carbon dioxide				
Citric acid				
Erythorbic acid				
Grape juice including concentrated grape juice				
Grape skin extract				
Gum Arabic				
Lactic acid				
Malic acid				
Metatartaric acid				
Mistelle				
Potassium sorbate				
Potassium sulphites				
Sodium carboxymethylcellulose				
Sorbic acid				
Sulphur dioxide				
Tannins				
Tartaric acid				
Yeast mannoproteins				

Table to clause 3

4 Processing aids

(1) Subject to any limits imposed by clause 5 of this Standard, any of the substances specified in the Table to this clause may be used in the production of wine, sparkling wine or fortified wine.

(2) In this clause –

cultures of microorganisms means yeasts or bacteria (including yeast ghosts) used in wine manufacture with or without the addition of any one or more of thiamine hydrochloride, niacin, pyridoxine, pantothenic acid, biotin and inositol.

(3) Thiamin chloride and thiamin hydrochloride may only be added to wine, sparkling wine and fortified wine to facilitate the growth of microorganisms.

Table to clause 4

Processing aid				
Activated carbon				
Agar				
Alginates, calcium and potassium salts				
Ammonium phosphates				
Argon				
Bentonite				
Calcium carbonate				
Calcium tartrate				
Carbon dioxide				
Cellulose				
Chitosan sourced from Aspergillus niger				
Collagen				
Copper sulphate				
Cultures of microorganisms				
Cupric citrate				
Diatomaceous earth				

Dimethyl dicarbonate
Dimethylpolysiloxane
Egg white
Enzymes
Gelatine
Hydrogen peroxide
Ion exchange resins
Isinglass
Lysozyme
Milk and milk products
Nitrogen
Oak
Oxygen
Perlite
Phytates
Plant proteins permitted as processing aids under clause
3(a) to Standard 1.3.3 Polyvinyl polypyrrolidone
Potassium carbonate
Potassium ferrocyanide
Potassium hydrogen carbonate
Potassium hydrogen tartrate
Silicon dioxide
Thiamin chloride
Thiamin hydrochloride

Editorial note:

Clause 3(a) to Standard 1.3.3 permits the use of foods, including water as processing aids. Therefore, plant proteins that are foods are permitted under that Standard, and would also be permitted under this Standard.

5 Composition

- (1) Wine and sparkling wine must contain no less than 45 mL/L of ethanol at 20°C.
- (2) Notwithstanding subclause (1), wine must not contain added ethanol.
- (3) Fortified wine must contain no less than 150 mL/L and no more than 220 mL/L of ethanol at 20°C.
- (4) Deleted
- (5) Wine, sparkling wine and fortified wine must contain no more than
 - (a) 250 mg/L in total of sulphur dioxide in the case of products containing less than 35 g/L of sugars, or 300 mg/L in total of sulphur dioxide in the case of other products; and
 - (b) 200 mg/L of sorbic acid or potassium sorbate expressed as sorbic acid; and
 - (c) 1 g/L of soluble chlorides expressed as sodium chloride; and
 - (d) 2 g/L of soluble sulphates expressed as potassium sulphate; and
 - (e) 400 mg/L of soluble phosphates expressed as phosphorus; and
 - (f) 1.5 g/L of volatile acidity excluding sulphur dioxide, expressed as acetic acid; and
 - (g) 0.1 mg/L of cyanides and complex cyanides expressed as hydrocyanic acid; and
 - (h) 200 mg/L of added dimethyl dicarbonate.

(6) If potassium ferrocyanide has been used as a processing aid in the manufacture of a wine, sparkling wine or fortified wine, the final product must have residual iron present.

(7) Wine, sparkling wine and fortified wine may contain added water in proportion not exceeding 70 mL/L where that water is necessary for the incorporation of any substance specified in clause 3 or clause 4, or where that water is incidental to the winemaking process and where the presence of water in wine is in conformance with good manufacturing practice.

(8) Where this clause does not otherwise specify a maximum permitted level for –

- (a) a food additive listed in the Table to clause 3; or
- (b) a processing aid listed in the Table to clause 4;

of this Standard, then the use of the food additive or processing aid must be consistent with conditions of Good Manufacturing Practice (GMP).

6 Sparkling wine

(1) In addition to the substances permitted by clauses 3 and 4 of this Standard, sparkling wine may also contain –

- (a) grape spirit; and
- (b) brandy; and
- (c) sugars.

(2) The addition of those foods specified in paragraphs (1)(a), (b) and (c) to sparkling wine must not increase its ethanol content by more than 25 mL/L at 20° C.

(3) Sparkling wine must contain no less than 5 g/L of carbon dioxide at 20°C.

7 Fortified wine

(1) In addition to the substances permitted by clauses 3 and 4 of this Standard, fortified wine may also contain caramel.

SCHEDULE

Specifications for the purposes of this Standard

Brandy

(1) Brandy –

- (a) must be matured in wooden containers for no less than 2 years; and
- (b) must contain no less than 250 mL/L of the spirit distilled at a strength of no more
- than 830 mL/L at 20°C of ethanol; and
- (c) may contain
 - (i) water; and
 - (ii) caramel; and
 - (iii) sugars; and
 - (iv) grape juice and grape juice concentrates;
 - (v) wine; and
 - (vi) prune juice; and
 - (vii) honey; and
 - (viii) flavourings; and
- (d) must not contain methanol in a proportion exceeding 3 g/L at 20°C of the ethanol content thereof.

Amendment History

The Amendment History provides information about each amendment to the Standard. The information includes commencement or cessation information for relevant amendments.

These amendments are made under section 92 of the *Food Standards Australia New Zealand Act 1991* unless otherwise indicated. Amendments do not have a specific date for cessation unless indicated as such.

About this compilation

This is a compilation of Standard 4.5.1 as in force on **9 January 2014** (up to Amendment No. 145). It includes any commenced amendment affecting the compilation to that date.

Prepared by Food Standards Australia New Zealand on 9 January 2014.

Uncommenced amendments or provisions ceasing to have effect

To assist stakeholders, the effect of any uncommenced amendments or provisions which will cease to have effect, may be reflected in the Standard as shaded boxed text with the relevant commencement or cessation date. These amendments will be reflected in a compilation registered on the Federal Register of Legislative Instruments including or omitting those amendments and provided in the Amendment History once the date is passed.

The following abbreviations may be used in the table below:

ad = added or inserted	am = amended
exp = expired or ceased to have effect	rep = repealed
rs = repealed and substituted	

Standard 4.5.1 was published in the Commonwealth of Australia Gazette No. FSC 5 on 24 October 2002 as Standard 4.1.1 (F2008B00809 – 23 December 2008) and has been amended as follows:

Clause affected	A'ment No.	FRLI registration Gazette	Commencement (Cessation)	How affected	Description of amendment
Title	72	F2008B00819 24 Dec 2008 FSC 14 20 May 2004	20 May 2004	am	Numbering of Standard changed from 4.1.1 to 4.5.1.
Standard	124	F2011L01450 8 July 2011 FSC 66 11 July 2011	11 July 2011	am	Spelling of 'micro-organism' to 'microorganism' wherever occurring.
1	72	F2008B00819 24 Dec 2008 FSC 14 20 May 2004	20 May 2004	rs	Definition of 'prepared cultures'.
3(2)	72	F2008B00819 24 Dec 2008 FSC 14 20 May 2004	20 May 2004	rs	Definition of 'wine'.
3(2)	90	F2006L03956 7 Dec 2006 FSC 32 7 Dec 2006	7 Dec 2006	rs	Subclause.
Table to clause 3	67	F2008B00814 24 Dec 2008 FSC 9 31 July 2003	31 July 2003	rs	Table.

Clause affected	A'ment No.	FRLI registration	Commencement (Cessation)	How affected	Description of amendment
		Gazette	(Ocssation)		
Table to clause 3	72	F2008B00819 24 Dec 2008 FSC 14 20 May 2004	20 May 2004	ad, rep	Insert entries for carbon dioxide and gum arabic and omitting the entry for uncharred oak.
Table to clause 3	78	F2005L01246 26 May 2005 FSC 20 26 May 2005	26 May 2005	ad	Entry for grape skin extract.
Table to clause 3	98	F2008L01488 15 May 2008 FSC 40 15 May 2008	15 May 2008	ad	Entry for yeast mannoproteins.
Table to clause 3	127	F2011L02371 15 Nov 2011 FSC 69 17 Nov 2011	17 Nov 2011	ad	Entry for sodium carboxymethylcellulose.
Table to clause 3	135	F2012L02371 15 Nov 2011 FSC 77 11 Oct 2012	11 Oct 2012	ad	Entry for dimethyl dicarbonate
4	90	F2006L03956 7 Dec 2006 FSC 32 7 Dec 2006	7 Dec 2006	rs	Clause only.
4(3)	103	F2008L03741 9 Oct 2008 FSC 45 9 Oct 2008	9 Oct 2008	ad	Subclause relating to thiamin chloride and thiamin hydrochloride.
Table to clause 4	67	F2008B00814 24 Dec 2008 FSC 9 31 July 2003	31 July 2003	а	Table.
Table to clause 4	70	F2008B00817 24 Dec 2008 FSC 12 29 April 2004	29 April 2004	ad	Entries for cupric citrate on a bentonite base and plant proteins. Insert Editorial note.
Table to clause 4	72	F2008B00819 24 Dec 2008 FSC 14 20 May 2004	20 May 2004	ad	Entries for oak and argon.
Table to clause 4	73	F2008B00820 24 Dec 2008 FSC 15 5 Aug 2004	5 Aug 2004	ad	Entry for collagen.
Table to clause 4	78	F2005L01246 26 May 2005 FSC 20 26 May 2005	26 May 2005	rep, ad	Omit calcium carbonate, potassium carbonate and potassium hydrogen carbonate. Insert dimethylpolysiloxane.
Table to clause 4	94	F2007L04074 11 Oct 2007 FSC 36 11 Oct 2007	11 Oct 2007	am	Entry for cupric citrate on a bentonite base.
Table to clause 4	103	F2008L03741 9 Oct 2008 FSC 45 9 Oct 2008	9 Oct 2008	rep	Entries for thiamin chloride and thiamin hydrochloride and associated footnote.
Table to clause 4	135	F2012L02371 15 Nov 2011 FSC 77 11 Oct 2012	11 Oct 2012	ad	Entry for dimethyl dicarbonate
Table to clause 4	145	F2014L00033 6 Jan 2014 FSC87 9 Jan 2014	9 Jan 2014	ad	Entry for chitosan sourced from Aspergillus niger.
5	72	F2008B00819 24 Dec 2008 FSC 14 20 May 2004	20 May 2004	rs	Clause.

Clause affected	A'ment No.	FRLI registration Gazette	Commencement (Cessation)	How affected	Description of amendment
5(1)	126	F2011L02066 13 Oct 2011 FSC 68 13 Oct 2011	13 Oct 2011	rs	Subclause to amend the minimum amount of ethanol allowed in wine.
5(4)	67	F2008B00814 24 Dec 2008 FSC 9 31 July 2003	31 July 2003	am	Correct minor typographical errors.
5(4)	124	F2011L01450 8 July 2011 FSC 66 11 July 2011	11 July 2011	rep	Subclause.
5(5)	90	F2006L03956 7 Dec 2006 FSC 32 7 Dec 2006	7 Dec 2006	am	Paragraph 5(5)(i).
5(5)	122	F2011L00694 5 May 2011 FSC 64 5 May 2011	5 May 2011	rs	Subclause as a consequential change due to amendments to Standard 1.3.3 to include co-extruded polystyrene with the entry for polyvinyl polypyrrolidone in the Table to clause 6.
5(7)	78	F2005L01246 26 May 2005 FSC 20 26 May 2005	26 May 2005	rep	Subclause.
5(7)	92	F2007L02406 2 Aug 2007 FSC 34 2 Aug 2007	2 Aug 2007	rs	Subclause in order to permit additional water to be present in wine for technological purposes and in conformance with good manufacturing practice.
5(8)	78	F2005L01246 26 May 2005 FSC 20 26 May 2005	26 May 2005	ad	Subclause.
6(1)	67	F2008B00814 24 Dec 2008 FSC 9 31 July 2003	31 July 2003	am	Correct minor typographical errors.
6(1)	78	F2005L01246 26 May 2005 FSC 20 26 May 2005	26 May 2005	rs	Subclause.
7	67	F2008B00814 24 Dec 2008 FSC 9 31 July 2003	31 July 2003	rep, rs	Omit subclauses (1) and (2) and renumber clause (3).