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► **B** **COMMISSION DELEGATED REGULATION (EU) 2019/934**
of 12 March 2019

supplementing Regulation (EU) No 1308/2013 of the European Parliament and of the Council as regards wine-growing areas where the alcoholic strength may be increased, authorised oenological practices and restrictions applicable to the production and conservation of grapevine products, the minimum percentage of alcohol for by-products and their disposal, and publication of OIV files

(OJ L 149, 7.6.2019, p. 1)

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		No	page	date
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▼B**COMMISSION DELEGATED REGULATION (EU) 2019/934****of 12 March 2019**

supplementing Regulation (EU) No 1308/2013 of the European Parliament and of the Council as regards wine-growing areas where the alcoholic strength may be increased, authorised oenological practices and restrictions applicable to the production and conservation of grapevine products, the minimum percentage of alcohol for by-products and their disposal, and publication of OIV files

*Article 1***Scope**

This Regulation lays down rules supplementing Regulation (EU) No 1308/2013 concerning wine-growing areas where the alcoholic strength may be increased, authorised oenological practices and restrictions applicable to the production and conservation of grapevine products, the minimum percentage of alcohol for by-products and their disposal, and publication of OIV files.

▼M3*Article 2*

Wine-growing areas where wines may have a maximum total alcoholic strength of 20 % vol.

The wine-growing areas referred to in the first indent of point (c) of the second paragraph of point (1) of Part II of Annex VII to Regulation (EU) No 1308/2013 shall be zones C I, C II and C III referred to in Appendix 1 to that Annex and the areas of zone B in which white wines with the following protected geographical indications may be produced: ‘Franche-Comté’ and ‘Val de Loire’.

▼B*Article 3***Authorised oenological practices**

1. The authorised oenological practices and restrictions applicable to the production and conservation of grapevine products falling within the scope of Part II of Annex VII to Regulation (EU) No 1308/2013, referred to in Article 80(1) of that Regulation, are laid down in Annex I to this Regulation.

Table 1 of Part A of Annex I lays down the authorised oenological processes and the conditions and limits of their use.

Table 2 of Part A of Annex I lays down the authorised oenological compounds and the conditions and limits of their use.

2. The Commission shall publish the files of the OIV Code of Oenological Practices referred to in column 2 of Table 1 and in column 3 of Table 2 of Part A of Annex I to this Regulation in the *Official Journal of the European Union*, C series.

3. Part B of Annex I lays down the maximum sulphur dioxide contents of wines.

4. Part C of Annex I lays down the maximum volatile acid contents of wines.

5. Part D of Annex I lays down the rules on sweetening.



Article 4

Experimental use of new oenological practices

1. For experimental purposes, referred to in Article 83(3) of Regulation (EU) No 1308/2013, each Member State may authorise the use of certain oenological practices or processes not provided for in that Regulation or in this Regulation, for a maximum of five years, on condition that:

- (a) the practices and processes concerned meet the requirements of the third subparagraph of Article 80(1) and Article 80(3)(b) to (e) of Regulation (EU) No 1308/2013;
- (b) such practices and processes are applied to quantities not exceeding 50 000 hectolitres per year for any one experiment;
- (c) the Member State concerned informs the Commission and the other Member States at the beginning of the experiment of the terms of each authorisation;
- (d) the processes shall be entered on the accompanying document referred to in Article 147(1) and in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.

‘Experiment’ means an operation or operations carried out in the context of a well-defined research project with a single experimental protocol.

2. The products obtained by the experimental use of such oenological practices and processes may be placed on the market of a Member State other than the Member State concerned provided the Member State authorising the experiment gives prior notification to the competent authorities of the Member State of destination of the terms of the authorisation and the quantities involved.

3. Within a period of three months following the end of the period referred to in paragraph 1, the Member State concerned shall forward to the Commission a report on the authorised experiment and the results thereof. The Commission shall notify the other Member States of those results.

4. Depending on these results, the Member State concerned may apply to the Commission for authorisation to continue the experiment, possibly with a larger quantity of products than in the original experiment, for a further maximum period of three years. The Member State concerned shall submit an appropriate file in support of its application. The Commission shall adopt a decision on the application in accordance with the procedure referred to in Article 229(2) of Regulation (EU) No 1308/2013.

5. The notification of information or documents to the Commission provided for in point (c) of paragraph 1 and in paragraphs 3 and 4 shall be made in accordance with Commission Delegated Regulation (EU) 2017/1183 ⁽¹⁾.

⁽¹⁾ Commission Delegated Regulation (EU) 2017/1183 of 20 April 2017 on supplementing Regulations (EU) No 1307/2013 and (EU) No 1308/2013 of the European Parliament and the Council with regard to the notifications to the Commission of information and documents (OJ L 171, 4.7.2017, p. 100).

▼B*Article 5***Oenological practices applicable to categories of sparkling wines**

In addition to the oenological practices and restrictions of general application laid down in Regulation (EU) No 1308/2013 and in Annex I to this Regulation, the authorised specific oenological practices and restrictions, including enrichment, acidification and de-acidification, concerning sparkling wines, quality sparkling wines and quality aromatic sparkling wines, referred to in points (4), (5) and (6) of Part II of Annex VII to Regulation (EU) No 1308/2013 are listed in Annex II to this Regulation.

*Article 6***Oenological practices applicable to liqueur wines**

In addition to the oenological practices and restrictions of general application laid down in Regulation (EU) No 1308/2013 and in Annex I to this Regulation, the authorised specific oenological practices and restrictions concerning liqueur wines referred to in point (3) of Part II of Annex VII to Regulation (EU) No 1308/2013 are listed in Annex III to this Regulation.

*Article 7***Definition of coupage**

1. ‘Coupage’ referred to in point (h) of Article 75(3) and Section C of Part II of Annex VIII to Regulation (EU) No 1308/2013 means the mixing of wines or musts of different origins, different vine varieties, different harvest years or different categories of wine or of must.
2. The following shall be regarded as different categories of wine or must:
 - (a) red wine, white wine and the musts or wines suitable for yielding one of these categories of wine;
 - (b) wines without a protected designation of origin and wines without protected geographical indication, wines with a protected designation of origin (PDO) and wines with a protected geographical indication (PGI) as well as musts or wines suitable for yielding one of these categories of wine.

For the purposes of this paragraph, rosé wine shall be regarded as red wine.

3. The following processes shall not be regarded as coupage:
 - (a) enrichment by the addition of concentrated grape must or rectified concentrated grape must;
 - (b) sweetening.

*Article 8***General rules on blending and coupage**

1. A wine may be obtained by blending or coupage only where the constituents of that blending or coupage possess the required characteristics for obtaining wine and comply with Regulation (EU) No 1308/2013 and this Regulation.

Coupage of a non-PDO/PGI white wine with a non-PDO/PGI red wine cannot produce a rosé wine.

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However, the second subparagraph does not exclude coupage of the type referred to therein where the final product is intended for the preparation of a cuvée as defined in point 12 of Part IV of Annex II to Regulation (EU) No 1308/2013 or intended for the production of semi-sparkling wines.

2. Coupage of a grape must or a wine which has undergone the oenological practice referred to in point 11.1 of Table 2 of Part A of Annex I to this Regulation with a grape must or a wine which has not undergone that practice shall be prohibited.

*Article 9***The purity and identification specifications of substances used in oenological practices**

1. Where they are not laid down by Commission Regulation (EU) No 231/2012⁽¹⁾, the purity and identification specifications of substances used in the oenological practices referred to in Article 75(3)(f) of Regulation (EU) No 1308/2013 shall be those referred to in column 4 of Table 2 of Part A of Annex I to this Regulation.

2. The enzymes and enzymatic preparations used in the authorised oenological practices and processes listed in Part A of Annex I shall meet the requirements of Regulation (EC) No 1332/2008 of the European Parliament and of the Council⁽²⁾.

*Article 10***Conditions governing the holding, circulation and use of products not complying with Article 80 of Regulation (EU) No 1308/2013 or this Regulation**

1. Products referred to in the first subparagraph of Article 80(2) of Regulation (EU) No 1308/2013 shall not be marketed and shall be destroyed. However, Member States may authorise under certain conditions the use of certain of such products, the characteristics of which they shall determine, by distilleries or vinegar factories or for industrial purposes.

2. Such products may not be held without legitimate cause by producers or traders and they may be moved only to distilleries, vinegar factories, or establishments using them for industrial purposes or products or to elimination plants.

3. Member States may have denaturing agents or indicators added to wines referred to in paragraph 1 in order to make them more easily identifiable. Where justified, they may also prohibit the uses provided for in paragraph 1 and have the products destroyed.

4. Wine produced before 1 August 2009 may be offered or supplied for direct human consumption provided that it complies with the Union or national rules in force prior to that date.

⁽¹⁾ Commission Regulation (EU) No 231/2012 of 9 March 2012 laying down specifications for food additives listed in Annexes II and III to Regulation (EC) No 1333/2008 of the European Parliament and the Council (OJ L 83, 22.3.2012, p. 1).

⁽²⁾ Regulation (EC) No 1332/2008 of the European Parliament and of the Council of 16 December 2008 on food enzymes and amending Council Directive 83/417/EEC, Council Regulation (EC) No 1493/1999, Directive 2000/13/EC, Council Directive 2001/112/EC and Regulation (EC) No 258/97 (OJ L 354, 31.12.2008, p. 7).

*Article 11***General rules applicable to the enrichment, acidification and deacidification of products other than wine**

The authorised processes referred to in point 1 of Section D of Part I of Annex VIII to Regulation (EU) No 1308/2013 must be carried out in a single operation. However, Member States may permit some of these processes to be carried out in more than one operation where this improves the vinification of the products concerned. In such cases, the limits laid down in Annex VIII to Regulation (EU) No 1308/2013 shall apply to the whole operation concerned.

*Article 12***Pouring of wine or grape must onto lees or grape marc or pressed ‘aszú’/‘výber’ pulp**

The pouring of wine or grape must onto lees or grape marc or pressed ‘aszú’/‘výber’ pulp, provided for in point 2 of Section D of Part II of Annex VIII to Regulation (EU) No 1308/2013, shall be carried out as follows, in accordance with the national provisions in force on 1 May 2004:

- (a) ‘Tokaji fordítás’ or ‘Tokajský fordítás’ shall be prepared by pouring must or wine on pressed ‘aszú’/‘výber’ pulp;
- (b) ‘Tokaji máslás’ or ‘Tokajský másláš’ shall be prepared by pouring must or wine on the lees of ‘szamorodni’/‘samorodné’ or ‘aszú’/‘výber’.

The products concerned must be from the same harvest year.

*Article 13***Fixing a minimum percentage of alcohol for by-products**

1. Subject to point 1 of Section D of Part II of Annex VIII to Regulation (EU) No 1308/2013, Member States shall fix a minimum percentage for the volume of alcohol that must be contained in the by-product, after its separation from wines, in relation to that contained in the wine produced. Member States may modulate that minimum percentage on the basis of objective and non-discriminatory criteria.

2. Where the relevant percentage fixed by Member States pursuant to paragraph 1 is not reached, the operator concerned shall deliver a quantity of wine from his own production that corresponds to the quantity needed to reach the minimum percentage.

3. For the purpose of determining the volume of alcohol contained in the by-products in relation to that contained in the wine produced, the standard wine natural alcoholic strengths by volume to be applied in the different wine-growing zones shall be:

- (a) 8,0 % for zone A;
- (b) 8,5 % for zone B;
- (c) 9,0 % for zone C I;
- (d) 9,5 % for zone C II;
- (e) 10,0 % for zone C III.

▼B*Article 14***Disposal of by-products**

1. Producers shall withdraw the by-products of winemaking or of any other processing of grapes under supervision by the competent authorities of the Member States, subject to the requirements on delivery and registration laid down in Article 9(1)(b) of Commission Delegated Regulation (EU) 2018/273 ⁽¹⁾ and Article 14(1)(b)(vii) and Article 18 of Commission Implementing Regulation (EU) 2018/274 ⁽²⁾, respectively.
2. Withdrawal shall be carried out without delay and no later than at the end of the wine year in which the by-products were obtained, in compliance with applicable Union legislation, in particular as regards environmental protection.
3. Member States may decide that producers who, during the wine year in question, do not produce more than 50 hectolitres of wine or must themselves on their own premises are not required to withdraw their by-products.
4. Producers may fulfil the obligation of disposing of all or a part of the by-products of winemaking or any other processing of grapes by delivering the by-products to distillation. Such disposal of the by-products shall be certified by the competent authority of the Member State concerned.
5. Member States may decide that the delivery to distillation of all or a part of the by-products of winemaking or of any other processing of grapes is made compulsory for all or certain producers on their territory on the basis of objective and non-discriminatory criteria.

▼M1*Article 15***Transitional arrangements**

Stocks of grapevine products produced before the date of application of this Regulation in accordance with the rules in force before that date may be released for human consumption.

⁽¹⁾ Commission Delegated Regulation (EU) 2018/273 of 11 December 2017 supplementing Regulation (EU) No 1308/2013 of the European Parliament and of the Council as regards the scheme of authorisations for vine plantings, the vineyard register, accompanying documents and certification, the inward and outward register, compulsory declarations, notifications and publication of notified information, and supplementing Regulation (EU) No 1306/2013 of the European Parliament and of the Council as regards the relevant checks and penalties, amending Commission Regulations (EC) No 555/2008, (EC) No 606/2009 and (EC) No 607/2009 and repealing Commission Regulation (EC) No 436/2009 and Commission Delegated Regulation (EU) 2015/560 (OJ L 58, 28.2.2018, p. 1).

⁽²⁾ Commission Implementing Regulation (EU) 2018/274 of 11 December 2017 laying down rules for the application of Regulation (EU) No 1308/2013 of the European Parliament and of the Council, as regards the scheme of authorisations for vine plantings, certification, the inward and outward register, compulsory declarations and notifications, and of Regulation (EU) No 1306/2013 of the European Parliament and of the Council as regards the relevant checks and repealing Commission Implementing Regulation (EU) 2015/561 (OJ L 58, 28.2.2018, p. 60).

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Article 16

Repeal

Regulation (EC) No 606/2009 is repealed.

Article 17

Entry into force

1. This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

2. It shall apply from 7 December 2019.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

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ANNEX I

PART A

AUTHORISED OENOLOGICAL PRACTICES

▼M3

Table 1

Authorised oenological processes as referred to in Article 3(1)

	1	2	3
	Oenological processes	Conditions and limits of use ⁽¹⁾	Categories of wine products ⁽⁴⁾
1	Aeration or oxygenation	Subject to the conditions set out in files 2.1.1 (2016) and 3.5.5 (2016) of the OIV Code of Oenological Practices.	(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
2	Heat treatments	Subject to the conditions set out in files 1.8 (1970), 2.2.4 (1988), 2.3.6 (1988), 2.3.9 (2005), 3.4.3 (1988), 3.4.3.1 (1990), 3.5.4 (1997) and 3.5.10 (1982) of the OIV Code of Oenological Practices.	Fresh grapes, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
2a	Cold treatments	Subject to the conditions set out in point 1(c) of Section B of Part I of Annex VIII to Regulation (EU) No 1308/2013 and in files 1.14 (2005), 1.15 (2005), 2.1.12.4 (1998), 2.3.6 (1988), 3.1.2 (1979), 3.1.2.1 (1979), 3.3.4 (2004) and 3.5.11.1 (2001) of the OIV Code of Oenological Practices.	Fresh grapes, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
3	Centrifugation and filtration with or without an inert filtering agent	Inert filtering agents are those referred to in files 2.1.11 (1970), 2.1.11.1 (1990), 3.2.2 (1989) and 3.2.2.1 (1990) of the OIV Code of Oenological Practices. Their use must not leave undesirable residues in the treated product.	(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
4	Create an inert atmosphere	Only for the purpose to handle the product shielded from the air.	(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
5	Elimination of sulphur dioxide by physical processes		Fresh grapes, (2), (10), (11), (12), (13) and (14)
6	Ion exchange resins	Subject to the conditions laid down in Appendix 3 to this Annex. The treatment shall be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.	Grape must intended for the manufacture of rectified concentrated grape must

▼ M3

	1	2	3
	Oenological processes	Conditions and limits of use ⁽¹⁾	Categories of wine products ⁽⁴⁾
7	Bubbling	Only when using argon or nitrogen.	(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
8	Flotation	Only when using nitrogen or carbon dioxide or by aerating. Subject to the conditions set out in file 2.1.14 (1999).	(10), (11) and (12)
9	Discs of pure paraffin impregnated with allyl isothiocyanate	Only for the purpose to create a sterile atmosphere. In Italy permitted solely as long as it is in conformity with that country's legislation and only in containers holding more than 20 litres. The use of allyl isothiocyanate is subject to the conditions and limits in Table 2 on authorised oenological compounds.	Partially fermented must for direct human consumption as such, (1), (2), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
10	Electrodialysis treatment	Only for the purpose to ensure the tartaric stabilisation of the wine. Subject to the conditions laid down in Appendix 5 to this Annex. The treatment shall be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.	Partially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
11	Pieces of oak wood	In winemaking and ageing, including in the fermentation of fresh grapes and grape must. Subject to the conditions laid down in Appendix 7 to this Annex. The treatment shall be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.	(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
12	Correction of the alcohol content of wine	Correction only carried out with wine. Subject to the conditions laid down in Appendix 8 to this Annex. The treatment shall be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.	(1), (2), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
13	Cation exchangers for tartaric stabilisation	Subject to the conditions laid down in file 3.3.3 (2011) of the OIV Code of Oenological Practices. It must also comply with Regulation (EC) No 1935/2004 of the European Parliament and of the Council ⁽²⁾ and with the national provisions adopted for the implementation thereof. The treatment shall be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.	Partially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)

▼ M3

	1	2	3
	Oenological processes	Conditions and limits of use ⁽¹⁾	Categories of wine products ⁽⁴⁾
14	Electro-membranary treatment	Only for acidification or deacidification. Subject to the conditions and limits laid down in Sections C and D of Part I of Annex VIII to Regulation (EU) No 1308/2013 and Article 11 of this Regulation. It must comply with Regulation (EC) No 1935/2004 and with Commission Regulation (EU) No 10/2011 ⁽³⁾ and with the national provisions adopted for the implementation thereof. Subject to the conditions set out in files 2.1.3.1.3 (2010), 2.1.3.2.4 (2012), 3.1.1.4 (2010), 3.1.2.4 (2012) of the OIV Code of Oenological Practices. The treatment shall be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.	(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
15	Cation exchangers for acidification	Subject to the conditions and limits laid down in Sections C and D of Part I of Annex VIII to Regulation (EU) No 1308/2013 and Article 11 of this Regulation. It must comply with Regulation (EC) No 1935/2004 and with the national provisions adopted for the implementation thereof. Subject to the conditions set out in files 2.1.3.1.4 (2012) and 3.1.1.5 (2012) of the OIV Code of Oenological Practices. The treatment shall be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.	(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
16	Membrane coupling	Only for the reduction in sugar content of musts. Subject to the conditions laid down in Appendix 9 to this Annex. The treatment shall be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.	(10)
17	Membrane contactors	Only for the purpose to manage the dissolved gas in wine. The addition of carbon dioxide for the products defined in points (4), (5), (6) and (8) of Part II of Annex VII to Regulation (EU) No 1308/2013 is prohibited. It must comply with Regulation (EC) No 1935/2004 and with Regulation (EU) No 10/2011 and with the national provisions adopted for the implementation thereof. Subject to the conditions set out in file 3.5.17 (2013) of the OIV Code of Oenological Practices. The treatment shall be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.	(1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
18	Membrane technology coupled with activated carbon	Only for the purpose to reduce excess 4-ethylphenol and 4-ethylguaiaacol in wines. Subject to the conditions laid down in Appendix 10 to this Annex. The treatment shall be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.	(1), (2), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
19	Filter plates containing zeolite y-faujasite	Only for the purpose to adsorb haloanisoles. Subject to the conditions laid down in file 3.2.15 (2016) of the OIV Code of Oenological Practices.	(1), (2), (3), (4), (5), (6), (7), (8), (9), (15) and (16)

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	1	2	3
	Oenological processes	Conditions and limits of use ⁽¹⁾	Categories of wine products ⁽⁴⁾
20	Partial concentration	<p>For grape must: subject to the conditions laid down in point 1(b) of Section B of Part I of Annex VIII to Regulation (EU) No 1308/2013 and in files 2.1.12 (1998), 2.1.12.1 (1993), 2.1.12.2 (2001), 2.1.12.3 (1998) and 2.1.12.4 (1998) of the OIV Code of Oenological Practices.</p> <p>For wine: subject to the conditions laid down in point 1(c) of Section B of Part I of Annex VIII to Regulation (EU) No 1308/2013 and in files 3.5.11 (2001) and 3.5.11.1 (2001) of the OIV Code of Oenological Practices.</p> <p>The treatment shall be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.</p>	(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (15) and (16)
21	Treatment by discontinuous high pressure processes	Subject to the conditions laid down in files 1.18 (2019) and 2.1.26 (2019) of the OIV Code of Oenological Practices.	Fresh grapes, (10), (11) and (12)
22	Treatment by continuous high pressure processes	Subject to the conditions laid down in file 2.2.10 (2020) of the OIV Code of Oenological Practices.	(10), (11) and (12)
23	Treatment of crushed grapes with ultrasound to promote the extraction of their compounds	Subject to the conditions laid down in file 1.17 (2019) of the OIV Code of Oenological Practices.	Fresh grapes
24	Treatment of grapes by pulsed electric fields	Subject to the conditions laid down in file 2.1.27 (2020) of the OIV Code of Oenological Practices.	Fresh grapes
25	Treatment of musts and wines using adsorbent styrene-divinylbenzene beads	Subject to the conditions laid down in files 2.2.11 (2020) and 3.4.22 (2020) of the OIV Code of Oenological Practices.	(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)

⁽¹⁾ The year in brackets following references to a file of the OIV Code of Oenological Practices indicates the version of the file authorised by the Union as authorised oenological practices, subject to the conditions and limits of use set out in this table.

⁽²⁾ Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food and repealing Directives 80/590/EEC and 89/109/EEC (OJ L 338, 13.11.2004, p 4).

⁽³⁾ Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food (OJ L 12, 15.1.2011, p. 1).

⁽⁴⁾ If not applicable to all categories of wine products laid down in Part II of Annex VII to Regulation (EU) No 1308/2013.

Table 2

Authorised oenological compounds as referred to in Article 3(1)

	1	2	3	4	5	6	7	8
	Substances/Activities	E number and/or CAS number	OIV Code of Oenological Practices ⁽¹⁾	OIV Codex file reference as referred to in Article 9(1)	Additive	Processing aid/substance used as processing aid ⁽²⁾	Conditions and limits of use ⁽³⁾	Categories of wine products ⁽⁴⁾
1	Acidity regulators							
1.1	Tartaric acid (L(+)-)	E 334/CAS 87-69-4	Files 2.1.3.1.1 (2001), 3.1.1.1 (2001)	COEI-1-LTARAC	x		Conditions and limits laid down in Sections C and D of Part I of Annex VIII to Regulation (EU) No 1308/2013 and Article 11 of this Regulation. The treatment shall be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013. Specifications for tartaric acid (L(+)-) laid down in point 2 of Appendix 1 to this Annex.	(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
1.2	Malic acid (D,L-; L-)	E 296/-	Files 2.1.3.1.1 (2001), 3.1.1.1 (2001)	COEI-1-ACIMAL	x			(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
1.3	Lactic acid	E 270/-	Files 2.1.3.1.1 (2001), 3.1.1.1 (2001)	COEI-1-ACILAC	x			(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
1.4	Potassium tartrate L(+)-	E 336(ii)/CAS 921-53-9	Files 2.1.3.2.2 (1979), 3.1.2.2 (1979)	COEI-1-POTTAR		x		(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
1.5	Potassium bicarbonate	E 501(ii)/CAS 298-14-6	Files 2.1.3.2.2 (1979), 3.1.2.2 (1979)	COEI-1-POTBIC		x		(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
1.6	Calcium carbonate	E 170/CAS 471-34-1	Files 2.1.3.2.2 (1979), 3.1.2.2 (1979)	COEI-1-CALCAR		x		(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)

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	1	2	3	4	5	6	7	8
	Substances/Activities	E number and/or CAS number	OIV Code of Oenological Practices ⁽¹⁾	OIV Codex file reference as referred to in Article 9(1)	Additive	Processing aid/ substance used as processing aid ⁽²⁾	Conditions and limits of use ⁽³⁾	Categories of wine products ⁽⁴⁾
1.8	Calcium sulphate	E 516/-	File 2.1.3.1.1.1 (2017)		x		Conditions and limits laid down in point 2(b) of Section A of Annex III. Maximum use level: 2 g/l.	(3)
1.9	Potassium carbonate	E 501(i)	Files 2.1.3.2.5 (2017), 3.1.2.2 (1979)			x	Conditions and limits laid down in Sections C and D of Part I of Annex VIII to Regulation (EU) No 1308/2013 and Article 11 of this Regulation. The treatment shall be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.	(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
1.10	Citric acid	E 330	Files 3.1.1 (1979), 3.1.1.1 (2001)	COEI-1-CITACI	x		Citric acid: Only objective a) of OIV files 3.1.1 (1979) and 3.1.1.1 (2001) applies. Maximum content in wine thus treated and placed on the market: 1 g/l.	(1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
1.11	Yeasts for wine production	-/-	Files 2.1.3.2.3 (2019), 2.1.3.2.3.1 (2019), 2.3.1 (2016)	COEI-1-SACCHA COEI-1-NOSACC		x ⁽²⁾		(10), (11) and (12)
1.12	Lactic acid bacteria	-/-	Files 2.1.3.2.3 (2019), 2.1.3.2.3.2 (2019), 3.1.2 (1979), 3.1.2.3 (1980)	COEI-1-BALACT		x ⁽²⁾		(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
2	Preservatives and antioxidants							
2.1	Sulphur dioxide	E 220/CAS 7446-09-5	Files 1.12 (2004), 2.1.2 (1987), 3.4.4 (2003)	COEI-1-SOUDIO	x		Limits (i.e. maximum quantity in the product placed on the market) as laid down in Part B of Annex I.	Fresh grapes, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
2.2	Potassium bisulphite	E 228/CAS 7773-03-7	Files 1.12 (2004), 2.1.2 (1987), 3.4.4 (2003)	COEI-1-POTBIS	x			Fresh grapes, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
2.3	Potassium metabisulphite	E 224/CAS 16731-55-8	Files 1.12 (2004), 2.1.2 (1987), 3.4.4 (2003)	COEI-1-POTANH	x			Fresh grapes, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)

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	1	2	3	4	5	6	7	8
	Substances/Activities	E number and/or CAS number	OIV Code of Oenological Practices ⁽¹⁾	OIV Codex file reference as referred to in Article 9(1)	Additive	Processing aid/substance used as processing aid ⁽²⁾	Conditions and limits of use ⁽³⁾	Categories of wine products ⁽⁴⁾
2.4	Potassium sorbate	E 202	File 3.4.5 (1988)	COEI-1-POTSOR	x			(1), (2), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
2.5	Lysozyme	E 1105	Files 2.2.6 (1997), 3.4.12 (1997)	COEI-1-LYSOZY	x	x		(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
2.6	L ascorbic acid	E 300	Files 1.11 (2001), 2.2.7 (2001), 3.4.7 (2001)	COEI-1-ASCACI	x		Maximum content in wine thus treated and placed on the market: 250 mg/l. Maximum 250 mg/l for each treatment.	Fresh grapes, (1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
2.7	Dimethyldicarbonate-(DMDC)	E242/CAS 4525-33-1	File 3.4.13 (2001)	COEI-1-DICDIM	x		The treatment shall be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.	Partially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
3	Adsorbents							
3.1	Charcoal for oenological use		Files 2.1.9 (2002), 3.5.9 (1970)	COEI-1-CHARBO		x	The treatment shall be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.	White wines, (2), (10), and (14)
3.2	Selective vegetal fibres		File 3.4.20 (2017)	COEI-1-FIBVEG		x		(1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)

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	1	2	3	4	5	6	7	8
	Substances/Activities	E number and/or CAS number	OIV Code of Oenological Practices ⁽¹⁾	OIV Codex file reference as referred to in Article 9(1)	Additive	Processing aid/substance used as processing aid ⁽²⁾	Conditions and limits of use ⁽³⁾	Categories of wine products ⁽⁴⁾
4	Activators for alcoholic and malolactic fermentation							
4.1	Microcrystalline cellulose	E 460(i)/CAS 9004-34-6	Files 2.3.2 (2019), 3.4.21 (2015)	COEI-1-CELMIC		x	It must comply with the specifications laid down in the Annex to Regulation (EU) No 231/2012.	Fresh grapes, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
4.2	Diammonium hydrogen phosphate	E 342/CAS 7783-28-0	File 4.1.7 (1995)	COEI-1-PHODIA		x	Only for alcoholic fermentation. No more than 1 g/l (expressed in salts) ⁽⁵⁾ or 0,3 g/l for the second fermentation of sparkling wines.	Fresh grapes, (2), (10), (11), (12), second alcoholic fermentation of (4), (5), (6) and (7)
4.3	Ammonium sulphate	E 517/CAS 7783-20-2	File 4.1.7 (1995)	COEI-1AMMSUL		x		
4.4	Ammonium bisulphite	-/CAS 10192-30-0		COEI-1-AMMHYD		x	Only for alcoholic fermentation. No more than 0,2 g/l (expressed in salts) and up to the limits set in points 2.1, 2.2 and 2.3.	Fresh grapes, (2), (10), (11) and (12)
4.5	Thiamine hydrochloride	-/CAS 67-03-8	Files 2.3.3 (1976), 4.1.7 (1995)	COEI-1-THIAMIN		x	Only for alcoholic fermentation. No more than 0,6 mg/l (expressed in thiamin) for each treatment.	Fresh grapes, (2), (10), (11), (12), second alcoholic fermentation of (4), (5), (6) and (7)
4.6	Yeast autolysates	-/-	Files 2.3.2 (2019), 3.4.21 (2015)	COEI-1-AUTLYS		x ⁽²⁾		Fresh grapes, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)

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	1	2	3	4	5	6	7	8
	Substances/Activities	E number and/or CAS number	OIV Code of Oenological Practices (1)	OIV Codex file reference as referred to in Article 9(1)	Additive	Processing aid/ substance used as processing aid (2)	Conditions and limits of use (3)	Categories of wine products (4)
4.7	Yeast cell walls	-/-	Files 2.3.4 (1988), 3.4.21 (2015)	COEI-1-YEHULL		x (2)		Fresh grapes, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
4.8	Inactivated yeasts	-/-	Files 2.3.2 (2019), 3.4.21 (2015)	COEI-1-INAYEA		x (2)		Fresh grapes, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
4.9	Inactivated yeasts with guaranteed glutathione levels	-/-	File 2.2.9 (2017)	COEI-1-LEVGLU		x (2)	Only for alcoholic fermentation.	Fresh grapes, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
5	Clarifying agents							
5.1	Edible gelatine	-/CAS 9000-70-8	Files 2.1.6 (1997), 3.2.1 (2011)	COEI-1-GELATI		x (2)		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
5.2	Wheat protein		Files 2.1.17 (2004), 3.2.7 (2004)	COEI-1-PROVEG		x (2)		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
5.3	Peas protein		Files 2.1.17 (2004), 3.2.7 (2004)	COEI-1-PROVEG		x (2)		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
5.4	Potatoes protein		Files 2.1.17 (2004), 3.2.7 (2004)	COEI-1-PROVEG		x (2)		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
5.5	Isinglass		File 3.2.1 (2011)	COEI-1-COLPOI		x		(1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
5.6	Casein	-/CAS 9005-43-0	File 2.1.16 (2004)	COEI-1-CASEIN		x (2)		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)

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	1	2	3	4	5	6	7	8
	Substances/Activities	E number and/or CAS number	OIV Code of Oenological Practices (1)	OIV Codex file reference as referred to in Article 9(1)	Additive	Processing aid/substance used as processing aid (2)	Conditions and limits of use (3)	Categories of wine products (4)
5.7	Potassium caseinates	-/CAS 68131-54-4	Files 2.1.15 (2004), 3.2.1 (2011)	COEI-1-POTCAS		x (2)		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
5.8	Egg albumin	-/CAS 9006-59-1	File 3.2.1 (2011)	COEI-1-OEUALB		x (2)		(1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
5.9	Bentonite	-/-	Files 2.1.8 (1970), 3.3.5 (1970)	COEI-1-BENTON		x		(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
5.10	Silicon dioxide (gel or colloidal solution)	E 551/-	Files 2.1.10 (1991), 3.2.1 (2011), 3.2.4 (1991)	COEI-1-DIOSIL		x		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
5.11	Kaolin	-/CAS 1332-58-7	File 3.2.1 (2011)	COEI-1-KAOLIN		x		(1), (2), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
5.12	Tannins		Files 2.1.7 (2019), 2.1.17 (2004), 3.2.6 (2019), 3.2.7 (2004), 4.1.8 (1981), 4.3.2 (1981)	COEI-1-TANINS		x		Fresh grapes, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
5.13	Chitosan derived from <i>Aspergillus niger</i> or <i>Agaricus bisporus</i>	-/CAS 9012-76-4	Files 2.1.22 (2009), 3.2.1 (2011), 3.2.12 (2009)	COEI-1-CHITOS		x		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
5.14	Chitin-glucan derived from <i>Aspergillus niger</i>	Chitin: CAS 1398-61-4; Glucan: CAS 9041-22-9.	Files 2.1.23 (2009), 3.2.1 (2011), 3.2.13 (2009)	COEI-1-CHITGL		x		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)

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	1	2	3	4	5	6	7	8
	Substances/Activities	E number and/or CAS number	OIV Code of Oenological Practices ⁽¹⁾	OIV Codex file reference as referred to in Article 9(1)	Additive	Processing aid/substance used as processing aid ⁽²⁾	Conditions and limits of use ⁽³⁾	Categories of wine products ⁽⁴⁾
5.15	Yeast protein extracts	-/-	Files 2.1.24 (2011), 3.2.14 (2011), 3.2.1 (2011)	COEI-1-EPLV		x		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
5.16	Polyvinylpyrrolidone	E 1202/CAS 25249-54-1	File 3.4.9 (1987)	COEI-1-PVPP		x		(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
5.17	Calcium alginate	E 404/CAS 9005-35-0	File 4.1.8 (1981)	COEI-1-ALGIAC		x	Only in the production of all categories of sparkling and semi-sparkling wines obtained by fermentation in bottle and with the lees separated by disgorging.	(4), (5), (6), (7), (8) and (9)
5.18	Potassium alginate	E 402/CAS 9005-36-1	File 4.1.8 (1981)	COEI-1-POTALG		x	Only in the production of all categories of sparkling and semi-sparkling wines obtained by fermentation in bottle and with the lees separated by disgorging.	(4), (5), (6), (7), (8) and (9)
6	Stabilising agents							
6.1	Potassium hydrogen tartrate	E336(i)/CAS 868-14-4	File 3.3.4 (2004)	COEI-1-POTBIT		x	Only to assist the precipitation of tartaric salts.	Partially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)

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	1	2	3	4	5	6	7	8
	Substances/Activities	E number and/or CAS number	OIV Code of Oenological Practices ⁽¹⁾	OIV Codex file reference as referred to in Article 9(1)	Additive	Processing aid/substance used as processing aid ⁽²⁾	Conditions and limits of use ⁽³⁾	Categories of wine products ⁽⁴⁾
6.2	Calcium tartrate	-/-	File 3.3.12 (1997)	COEI-1-CALTAR		x		Partially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
6.3	Citric acid	E 330	Files 3.3.1 (1970), 3.3.8 (1970)	COEI-1-CITACI	x		Maximum content in wine thus treated and placed on the market: 1 g/l.	Partially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
6.4	Tannins	-/-	Files 2.1.7 (2019), 3.2.6 (2019), 3.3.1 (1970)	COEI-1-TANINS				Fresh grapes, partially fermented must for direct human consumption as such, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
6.5	Potassium ferrocyanide	E 536/-	Files 3.3.1 (1970), 3.3.10 (1970)	COEI-1-POTFER		x	Subject to the conditions laid down in Appendix 4 to this Annex. The treatment shall be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.	Partially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)

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	1	2	3	4	5	6	7	8
	Substances/Activities	E number and/or CAS number	OIV Code of Oenological Practices (1)	OIV Codex file reference as referred to in Article 9(1)	Additive	Processing aid/substance used as processing aid (2)	Conditions and limits of use (3)	Categories of wine products (4)
6.6	Calcium phytate	-/CAS 3615-82-5	File 3.3.1 (1970)	COEI-1-CALPHY		x	Only for red wines and no more than 8 g/hl. Subject to the conditions laid down in Appendix 4 to this Annex.	Partially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
6.7	Metatartaric acid	E 353/-	File 3.3.7 (1970)	COEI-1-METACI	x			Partially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
6.8	Gum arabic	E 414/CAS 9000-01-5	File 3.3.6 (1972)	COEI-1-GOMARA	x		<i>Quantum satis.</i>	Partially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
6.9	Tartaric acid D, L- or its neutral salt of potassium	-/CAS 133-37-9	Files 2.1.21 (2008), 3.4.15 (2008)	COEI-1-DLTART		x	Only for precipitating excess calcium. Subject to the conditions laid down in Appendix 4 to this Annex.	Partially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)

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	1	2	3	4	5	6	7	8
	Substances/Activities	E number and/or CAS number	OIV Code of Oenological Practices (1)	OIV Codex file reference as referred to in Article 9(1)	Additive	Processing aid/substance used as processing aid (2)	Conditions and limits of use (3)	Categories of wine products (4)
6.10	Yeast mannoproteins	-/-	File 3.3.13 (2005)	COEI-1-MANPRO	x			Partially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
6.11	Carboxymethylcellulose	E466/-	File 3.3.14 (2020)	COEI-1-CMC	x		Only to ensure tartaric stabilisation.	White and rosé wines, (4), (5), (6), (7), (8) and (9)
6.12	Polyvinylimidazole-polyvinylpyrrolidone copolymers (PVI/PVP)	-/CAS 87865-40-5	Files 2.1.20 (2014), 3.4.14 (2014)	COEI-1-PVIPVP		x	The treatment shall be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.	(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
6.13	Potassium poly-aspartate	E 456/CAS 64723-18-8	File 3.3.15 (2016)	COEI-1-POTPOL	x		Only to contribute to the tartaric stabilization.	(1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
6.14	Fumaric acid	E 297/CAS 110-17-8	Files 3.4.2 (2021), 3.4.23 (2021)		x			(1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
7	Enzymes (6)							
7.1	Urease	EC 3.5.1.5	File 3.4.11 (1995)	COEI-1-UREASE COEI-1-PRENZY		x	Only to reduce the level of urea in the wine. Subject to the conditions laid down in Appendix 6 to this Annex.	Partially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)

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	1	2	3	4	5	6	7	8
	Substances/Activities	E number and/or CAS number	OIV Code of Oenological Practices ⁽¹⁾	OIV Codex file reference as referred to in Article 9(1)	Additive	Processing aid/ substance used as processing aid ⁽²⁾	Conditions and limits of use ⁽³⁾	Categories of wine products ⁽⁴⁾
7.2	Pectin lyases	EC 4.2.2.10	Files 1.13 (2021); 2.1.4 (2021); 2.1.18 (2021); 3.2.8 (2021); 3.2.11 (2021)	COEI-1-ACTPLY COEI-1-PRENZY		x	Only for oenological purposes in maceration, clarification, stabilisation, filtration and to reveal the aromatic precursors of grapes.	Fresh grapes, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
7.3	Pectin methylesterase	EC 3.1.1.11	Files 1.13 (2021), 2.1.4 (2021), 2.1.18 (2021), 3.2.8 (2021), 3.2.11 (2021)	COEI-1-ACTPME COEI-1-PRENZY		x	Only for oenological purposes in maceration, clarification, stabilisation, filtration and to reveal the aromatic precursors of grapes.	Fresh grapes, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
7.4	Polygalacturonase	EC 3.2.1.15	Files 1.13 (2021), 2.1.4 (2021), 2.1.18 (2021), 3.2.8 (2021), 3.2.11 (2021)	COEI-1-ACTPGA COEI-1-PRENZY		x	Only for oenological purposes in maceration, clarification, stabilisation, filtration and to reveal the aromatic precursors of grapes.	Fresh grapes, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
7.5	Hemicellulase	EC 3.2.1.78	Files 1.13 (2021), 2.1.4 (2021), 2.1.18 (2021), 3.2.8 (2021), 3.2.11 (2021)	COEI-1-ACTGHE COEI-1-PRENZY		x	Only for oenological purposes in maceration, clarification, stabilisation, filtration and to reveal the aromatic precursors of grapes.	Fresh grapes, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
7.6	Cellulase	EC 3.2.1.4	Files 1.13 (2021), 2.1.4 (2021), 2.1.18 (2021), 3.2.8 (2021), 3.2.11 (2021)	COEI-1-ACTCEL COEI-1-PRENZY		x	Only for oenological purposes in maceration, clarification, stabilisation, filtration and to reveal the aromatic precursors of grapes.	Fresh grapes, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)

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	1	2	3	4	5	6	7	8
	Substances/Activities	E number and/or CAS number	OIV Code of Oenological Practices (1)	OIV Codex file reference as referred to in Article 9(1)	Additive	Processing aid/substance used as processing aid (2)	Conditions and limits of use (3)	Categories of wine products (4)
7.7	Betaglucanase	EC 3.2.1.58	File 3.2.10 (2004)	COEI-1-BGLUCA COEI-1-PRENZY		x	Only for oenological purposes in maceration, clarification, stabilisation, filtration and to reveal the aromatic precursors of grapes.	(1), (2), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
7.8	Glycosidase	EC 3.2.1.20	Files 2.1.19 (2013), 3.2.9 (2013)	COEI-1-PRENZY		x	Only for oenological purposes in maceration, clarification, stabilisation, filtration and to reveal the aromatic precursors of grapes.	(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
7.9	Arabinanase	EC 3.2.1.99	Files 1.13 (2021), 2.1.4 (2021), 2.1.18 (2021), 3.2.8 (2021), 3.2.11 (2021)	COEI-1-ACTARA COEI-1-PRENZY		x	Only for oenological purposes in maceration, clarification, stabilisation, filtration and to reveal the aromatic precursors of grapes.	Fresh grapes, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
7.10	Beta-glucanase (β1-3, β1-6)	EC 3.2.1.6	File 3.5.7 (2013)	COEI-1-ACTGLU COEI-1-PRENZY		x	Only for oenological purposes in maceration, clarification, stabilisation, filtration and to reveal the aromatic precursors of grapes.	(1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
7.11	Glucosidase	EC 3.2.1.21	Files 2.1.19 (2013), 3.2.9 (2013)	COEI-1-GLYCOS COEI-1-PRENZY		x	Only for oenological purposes in maceration, clarification, stabilisation, filtration and to reveal the aromatic precursors of grapes.	(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)

▼ M3

	1	2	3	4	5	6	7	8
	Substances/Activities	E number and/or CAS number	OIV Code of Oenological Practices (1)	OIV Codex file reference as referred to in Article 9(1)	Additive	Processing aid/substance used as processing aid (2)	Conditions and limits of use (3)	Categories of wine products (4)
7.12	Aspergillopepsin I	EC 3.4.23.18	Files 2.2.12 (2021), 3.3.16 (2021)	COEI-1-PROTEA COEI-1-PRENZY		x	Only for oenological purposes in maceration, clarification, stabilisation, filtration and to reveal the aromatic precursors of grapes	(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
8	Gases and packaging gases (7)							
8.1	Argon	E 938/CAS 7440-37-1	Files 2.2.5 (1970), 3.2.3 (2002)	COEI-1-ARGON	x (7)	x		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
8.2	Nitrogen	E 941/CAS 7727-37-9	Files 2.1.14 (1999), 2.2.5 (1970), 3.2.3 (2002)	COEI-1-AZOTE	x (7)	x		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
8.3	Carbon dioxide	E 290/CAS 124-38-9	Files 1.7 (1970), 2.1.14 (1999), 2.2.3 (1970), 2.2.5 (1970), 2.3.9 (2005), 4.1.10 (2002)	COEI-1-DIOCAR	x (7)	x	In the case of still wines the maximum carbon dioxide content in the wine so treated and placed on the market is 3 g/l, while the excess pressure caused by the carbon dioxide must be less than 1 bar at a temperature of 20 °C.	Partially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
8.4	Gaseous oxygen	E 948/CAS 17778-80-2	Files 2.1.1 (2016), 3.5.5 (2016)	COEI-1-OXYGEN		x		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
9	Fermentation agents							
9.1	Yeasts for wine production	-/-	Files 2.1.3.2.3.1. (2019), 2.3.1 (2016), 4.1.8 (1981)	COEI-1-SACCHA COEI-1-NOSACC		x (2)		Fresh grapes, (2), (10), (11), (12), (13), second alcoholic fermentation of (4), (5), (6) and (7)

▼M3

	1	2	3	4	5	6	7	8
	Substances/Activities	E number and/or CAS number	OIV Code of Oenological Practices ⁽¹⁾	OIV Codex file reference as referred to in Article 9(1)	Additive	Processing aid/substance used as processing aid ⁽²⁾	Conditions and limits of use ⁽³⁾	Categories of wine products ⁽⁴⁾
9.2	Lactic acid bacteria	-/-	Files 2.1.3.2.3.2 (2019), 3.1.2 (1979), 3.1.2.3 (1980)	COEI-1-BALACT		x ⁽²⁾		(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
10	Correction of defects							
10.1	Copper sulphate, pentahydrate	-/CAS 7758-99-8	File 3.5.8 (1989)	COEI-1-CUISUL		x	No more than 1 g/hl, provided that the copper content of the product so treated does not exceed 1 mg/l, with the exception of liqueur wines prepared from fresh unfermented or slightly fermented grape must, for which the copper content may not exceed 2 mg/l.	Partially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
10.2	Copper citrate	-/CAS 866-82-0	File 3.5.14 (2008)	COEI-1-CUICIT		x	No more than 1 g/hl, provided that the copper content of the product so treated does not exceed 1 mg/l, with the exception of liqueur wines prepared from fresh unfermented or slightly fermented grape must, for which the copper content may not exceed 2 mg/l.	Partially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
10.3	Chitosan derived from <i>Aspergillus niger</i> or <i>Agaricus bisporus</i>	-/CAS 9012-76-4	File 3.4.16 (2009)	COEI-1-CHITOS		x		(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)

▼ M3

	1	2	3	4	5	6	7	8
	Substances/Activities	E number and/or CAS number	OIV Code of Oenological Practices (1)	OIV Codex file reference as referred to in Article 9(1)	Additive	Processing aid/substance used as processing aid (2)	Conditions and limits of use (3)	Categories of wine products (4)
10.4	Chitin-glucan derived from <i>Aspergillus niger</i>	Chitin: CAS 1398-61-4; Glucan: CAS 9041-22-9.	File 3.4.17 (2009)	COEI-1-CHITGL		x		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
10.5	Inactivated yeasts	-/-		COEI-1-INAYEA		x (2)		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
11	Other practices							
11.1	Aleppo pine resin	-/-			x		Subject to the conditions laid down in Appendix 2 to this Annex.	(2), (10) and (11)
11.2	Fresh lees	-/-				x (2)	Only in dry wines. Fresh lees are sound and undiluted and contain yeasts resulting from the recent vinification of dry wine. Quantities not exceeding 5 % of the volume of product treated.	(1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
11.3	Caramel	E 150 a-d/-	File 4.3 (2007)	COEI-1-CARAMEL	x		To reinforce the colour as defined in point 2 of Annex I to Regulation (EC) No 1333/2008.	(3)
11.4	Allyl isothiocyanate	-/57-06-7				x	Only to impregnate discs of pure paraffin. See Table 1. No trace of allyl isothiocyanate must be present in the wine.	Only for partially fermented must for direct human consumption as such, and wine.

▼ **M3**

	1	2	3	4	5	6	7	8
	Substances/Activities	E number and/or CAS number	OIV Code of Oenological Practices ⁽¹⁾	OIV Codex file reference as referred to in Article 9(1)	Additive	Processing aid/ substance used as processing aid ⁽²⁾	Conditions and limits of use ⁽³⁾	Categories of wine products ⁽⁴⁾
11.5	Inactivated yeasts	-/-		COEI-1-INAYEA		x ⁽²⁾		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)

⁽¹⁾ The year in brackets following references to a file of the OIV Code of Oenological Practices indicates the version of the file authorised by the Union as authorised oenological practices, subject to the conditions and limits of use set out in this table.

⁽²⁾ Substances used as processing aids as referred to in Article 20(d) of Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers, amending Regulations (EC) No 1924/2006 and (EC) No 1925/2006 of the European Parliament and of the Council, and repealing Commission Directive 87/250/EEC, Council Directive 90/496/EEC, Commission Directive 1999/10/EC, Directive 2000/13/EC of the European Parliament and of the Council, Commission Directives 2002/67/EC and 2008/5/EC and Commission Regulation (EC) No 608/2004 (OJ L 304, 22.11.2011, p. 18).

⁽³⁾ The authorised oenological compounds are to be used in line with the provisions contained in the files of the OIV Code of Oenological Practices referred to in column 3 unless any further conditions and limits of use as laid down in this column apply.

⁽⁴⁾ If not applicable to all categories of wine products laid down in Part II of Annex VII to Regulation (EU) No 1308/2013.

⁽⁵⁾ The ammonium salts referred to in line 4.2, 4.3 and 4.4 may also be used in combination, up to the overall limit of 1g/l or 0,3 g/l for the second fermentation of sparkling wine. However, the ammonium salt referred to in line 4.4 may not exceed the limit referred to in line 4.4.

⁽⁶⁾ See also Article 9(2) of this Regulation.

⁽⁷⁾ When they are used as additives a referred to in point 20 of Annex I to Regulation (EC) No 1333/2008 of the European Parliament and of the Council of 16 December 2008 on food additives (OJ L 354, 31.12.2008, p. 16).

▼B*Appendix 1***Tartaric acid (L(+)-) and derived products****▼M3**

1. Tartaric acid, the use of which for deacidification purposes is provided for in line item 1.1 of Table 2 of this Annex, may be used only for products that:
are from the Elbling and Riesling vine varieties; and
are obtained from grapes harvested in Germany in wine-growing zone A.

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2. Tartaric acid, the use of which is provided for in line item 1.1 of Table 2 of this Annex, also called tartaric acid (L(+)-), must be of agricultural origin and extracted specifically from wine products. It must also comply with the purity criteria laid down in Regulation (EU) No 231/2012.
3. The following derived products of tartaric acid (L(+)-), the use of which is provided for in the following line items of Table 2 of this Annex, must be of agricultural origin:
 - calcium tartrate (1.7)
 - potassium tartrate (1.4)
 - potassium hydrogen tartrate (6.1)
 - metatartaric acid (6.7).

▼B*Appendix 2***Aleppo pine resin**

1. Aleppo pine resin, the use of which is provided for in line item 11.1 of Table 2 of this Annex, may only be used to produce 'retsina' wine. This oenological practice may be carried out only:
 - (a) in the geographical territory of Greece;
 - (b) using grape must from grape varieties, areas of production and wine-making areas as specified in Greek national provisions in force at 31 December 1980;
 - (c) by adding 1 000 grams or less of resin per hectolitre of the product used, before fermentation or, where the actual alcoholic strength by volume does not exceed one third of the overall alcoholic strength by volume, during fermentation.
2. Greece shall notify the Commission in advance if it intends to amend the provisions referred to in point 1(b). That notification shall be made in accordance with Delegated Regulation (EU) 2017/1183. If the Commission does not respond within two months of receipt of such notification, Greece may implement the planned amendments.



Appendix 3

Ion exchange resins

The ion exchange resins which may be used in accordance with line item 6 of Table 1 of this Annex are styrene and divinylbenzene copolymers containing sulphonic acid or ammonium groups. They must comply with the requirements laid down in Regulation (EC) No 1935/2004 and Union and national provisions adopted in implementation thereof. In addition, when tested by the analysis method laid down in the third paragraph of this Appendix, they must not lose more than 1 mg/l of organic matter into any of the solvents listed. They must be regenerated with substances permitted for use in the preparation of foodstuffs.

These resins may be used only under the supervision of an oenologist or technician and in installations approved by the authorities of the Member States on whose territory they are used. The authorities shall lay down the duties and responsibility incumbent on approved oenologists and technicians.

Analysis method for determining the loss of organic matter from ion exchange resins:

1. SCOPE AND AREA OF APPLICATION

The method determines the loss of organic matter from ion exchange resins.

2. DEFINITION

The loss of organic matter from ion exchange resins. The loss of organic matter is determined by the method specified.

3. PRINCIPLE

Extracting solvents are passed through prepared resins and the weight of organic matter extracted is determined gravimetrically.

4. REAGENTS

All reagents shall be of analytical quality.

Extracting solvents.

4.1. Distilled water or deionised water of equivalent purity.

4.2. Ethanol, 15 % v/v. Prepare by mixing 15 parts of absolute ethanol with 85 parts of water (point 4.1).

4.3. Acetic acid, 5 % m/m. Prepare by mixing 5 parts of glacial acetic acid with 95 parts of water (point 4.1).

5. APPARATUS

5.1. Ion exchange chromatography columns.

5.2. Measuring cylinders, capacity 2 l.

5.3. Evaporating dishes capable of withstanding a muffle furnace at 850 °C.

5.4. Drying oven, thermostatically controlled at 105 ± 2 °C.

5.5. Muffle furnace, thermostatically controlled at 850 ± 25 °C.

5.6. Analytical balance, accurate to 0,1 mg.

5.7. Evaporator, hot plate or infra-red evaporator.

6. PROCEDURE

6.1. Add to each of three separate ion exchange chromatography columns (point 5.1) 50 ml of the ion exchange resin to be tested, washed and treated in accordance with the manufacturer's directions for preparing resins for use with food.

▼ B

- 6.2. For the anionic resins, pass the three extracting solvents (points 4.1, 4.2 and 4.3) separately through the prepared columns (point 6.1) at a flow rate of 350 to 450 ml/h. Discard the first litre of eluate in each case and collect the next two litres in measuring cylinders (point 5.2). For the cationic resins, pass only solvents referred to in points 4.1 and 4.2 through the columns prepared for this purpose.
- 6.3. Evaporate the three eluates over a hotplate or with an infrared evaporator (point 5.7) in separate evaporating dishes (point 5.3) which have been previously cleaned and weighed (m_0). Place the dishes in an oven (point 5.4) and dry to constant weight (m_1).
- 6.4. After recording the constant weight (point 6.3), place the evaporating dish in the muffle furnace (point 5.5) and ash to constant weight (m_2).
- 6.5. Calculate the organic matter extracted (point 7.1). If the result is greater than 1 mg/l, carry out a blank test on the reagents and recalculate the weight of organic matter extracted.

The blank test shall be carried out by repeating the operations referred to in points 6.3 and 6.4 but using two litres of the extracting solvent, to give weights m_3 and m_4 in points 6.3 and 6.4 respectively.

7. EXPRESSION OF THE RESULTS

7.1. Formula and calculation of results

The organic matter extracted from ion exchange resins, in mg/l, is given by:

$$500 (m_1 - m_2)$$

where m_1 and m_2 are expressed in grams.

The corrected weight (mg/l) of the organic matter extracted from ion exchange resins is given by:

$$500 (m_1 - m_2 - m_3 + m_4)$$

where m_1 , m_2 , m_3 and m_4 are expressed in grams.

- 7.2. The difference in the results between two parallel determinations carried out on the same sample must not exceed 0,2 mg/l.

▼B*Appendix 4***Potassium ferrocyanide****Calcium phytate****DL tartaric acid**

Potassium ferrocyanide or calcium phytate, the use of which is provided for in line items 6.5 and 6.6 of Table 2 of this Annex, or DL tartaric acid, the use of which is provided for in line item 6.9 of Table 2 of this Annex, may be used only under the supervision of an oenologist or technician officially approved by the authorities of the Member State in whose territory the process is carried out, the extent of whose responsibility shall be fixed, if necessary, by the Member State concerned.

After treatment with potassium ferrocyanide or calcium phytate, the wine must contain traces of iron.

Supervision of the use of the product referred to in the first paragraph shall be governed by the provisions adopted by the Member States.

*Appendix 5***Requirements for electro dialysis treatment**

The purpose is to obtain tartaric stability of the wine with regard to potassium hydrogen tartrate and calcium tartrate (and other calcium salts) by extraction of ions in supersaturation in the wine under the action of an electrical field and using membranes that are either anion-permeable or cation-permeable.

1. MEMBRANE REQUIREMENTS

- 1.1. The membranes are to be arranged alternately in a 'filter-press' type system or any other appropriate system separating the treatment (wine) and concentration (waste water) compartments.
- 1.2. The cation-permeable membranes must be designed to extract cations only, in particular K^+ , Ca^{++} .
- 1.3. The anion-permeable membranes must be designed to extract anions only, in particular tartrate anions.
- 1.4. The membranes must not excessively modify the physico-chemical composition and sensory characteristics of the wine. They must meet the following requirements:
 - they must be manufactured according to good manufacturing practice from substances authorised for the manufacture of plastic materials intended to come into contact with foodstuffs as listed in Annex I to Regulation (EU) No 10/2011,
 - the user of the electro dialysis equipment must show that the membranes used meet the above requirements and that any replacements have been carried out by specialised personnel,
 - they must not release any substance in quantities endangering human health or affecting the taste or smell of foodstuffs and must meet the criteria laid down in Regulation (EU) No 10/2011,
 - their use must not trigger interactions between their constituents and the wine liable to result in the formation of new compounds that may be toxic in the treated product.

The stability of fresh electro dialysis membranes is to be determined using a simulant reproducing the physico-chemical composition of the wine for investigation of possible migration of certain substances from them.

The experimental method recommended is as follows:

The simulant is a water-alcohol solution buffered to the pH and conductivity of the wine. Its composition is as follows:

- absolute ethanol: 11 l,
- potassium hydrogen tartrate: 380 g,
- potassium chloride: 60 g,
- concentrated sulphuric acid: 5 ml,
- distilled water: to make up 100 litres,

This solution is used for closed circuit migration tests on an electro dialysis stack under tension (1 volt/cell), on the basis of 50 l/m² of anionic and cationic membranes, until 50 % demineralisation of the solution. The effluent circuit is initiated by a 5 g/l potassium chloride solution. Migrating substances are tested for in both the simulant and the effluent.

▼ B

Organic molecules entering into the membrane composition that are liable to migrate into the treated solution will be determined. A specific determination will be carried out for each of these constituents by an approved laboratory. The content in the simulatant of all the determined compounds must be less than 50 µg/l.

The general rules on controls of materials in contact with foodstuffs must be applied to these membranes.

2. MEMBRANE UTILISATION REQUIREMENTS

The membrane pair is formulated so that the following conditions are met:

- the pH reduction of the wine is to be no more than 0,3 pH units,
- the volatile acidity reduction is to be less than 0,12 g/l (2 meq expressed as acetic acid),
- treatment must not affect the non-ionic constituents of the wine, in particular polyphenols and polysaccharides,
- diffusion of small molecules such as ethanol is to be reduced and must not cause a reduction in alcoholic strength of more than 0,1 % vol.,
- the membranes must be conserved and cleaned by approved methods with substances authorised for use in the preparation of foodstuffs,
- the membranes are marked so that alternation in the stack can be checked,
- the equipment is to be run using a command and control mechanism that will take account of the particular instability of each wine so as to eliminate only the supersaturation of potassium hydrogen tartrate and calcium salts,
- the treatment is to be carried out under the responsibility of an oenologist or qualified technician.

▼ M3



Appendix 6

Requirements for urease

1. International code for urease: EC 3-5-1-5, CAS No: 9002-13-5.
2. Activity: urease activity (active at acidic pH), to break down urea into ammonia and carbon dioxide. The stated activity is not less than 5 units/mg, one unit being defined as the amount that produces one μmol of ammonia per minute at 37 °C from 5 g/l urea at pH 4.
3. Origin: *Lactobacillus fermentum*.
4. Area of application: breaking down urea present in wine intended for prolonged ageing, where its initial urea concentration is higher than 1 mg/l.
5. Maximum dose: 75 mg of enzyme preparation per litre of wine treated, not exceeding 375 units of urease per litre of wine. After treatment, all residual enzyme activity must be eliminated by filtering the wine (pore size < 1 μm).
6. Chemical and microbiological purity specifications:

Loss on drying	Less than 10 %
Heavy metals	Less than 30 ppm
Pb	Less than 10 ppm
As	Less than 2 ppm
Total coliforms	Absent
<i>Salmonella</i> spp	Absent in 25 g sample
Aerobic count	Less than 5×10^4 cells/g

Urease used in the treatment of wine must be prepared under similar conditions to those for urease as covered by the 'Opinion on the use of urease prepared from *Lactobacillus fermentum* in wine production' of the Scientific Committee for Food of 10 December 1998.

▼ B*Appendix 7***Requirements for pieces of oak wood****PURPOSE, ORIGIN AND AREA OF APPLICATION**

Pieces of oak wood are used in winemaking and ageing, including in the fermentation of fresh grapes and grape must, to pass on certain characteristics of oak wood to wine.

The pieces of oak wood must come exclusively from the *Quercus* genus.

They may be left in their natural state, or heated to a low, medium or high temperature, but they may not have undergone combustion, including surface combustion, nor be carbonaceous or friable to the touch. They may not have undergone any chemical, enzymatic or physical processes other than heating. No product may be added for the purpose of increasing their natural flavour or the amount of their extractible phenolic compounds.

LABELLING

The label must mention the origin of the botanical species of oak and the intensity of any heating, the storage conditions and safety precautions.

DIMENSIONS

The dimensions of the particles of wood must be such that at least 95 % in weight are retained by a 2 mm mesh filter (9 mesh).

PURITY

The pieces of oak wood may not release any substances in concentrations which may be harmful to health.

▼ M3

▼B*Appendix 8***Requirements for treatment to correct the alcohol content of wines**

The aim of treatment to correct alcohol content ('the treatment') is to reduce excessive levels of ethanol in wine in order to improve the balance of flavour.

Requirements:

- (1) The objectives may be achieved by separation techniques applied separately or in combination.
- (2) The wines treated must have no organoleptic faults and must be suitable for direct human consumption.
- (3) Elimination of alcohol from the wine may not be carried out if one of the enrichment operations laid down in Part I of Annex VIII to Regulation (EU) No 1308/2013 has been applied to one of the wine products used in the preparation of the wine in question.
- (4) The alcohol content may be reduced by a maximum of 20 % and the total alcoholic strength by volume of the final product must comply with that defined in point (a) of the second paragraph of point (1) of Part II of Annex VII to Regulation (EU) No 1308/2013.
- (5) The treatment is to be carried out under the responsibility of an oenologist or qualified technician.
- (6) ► **M3** ————— ◀
- (7) The Member States may require this treatment to be notified in advance to the competent authorities.

▼B*Appendix 9***Requirements for treatment to reduce the sugar content of musts by membrane coupling**

The aim of treatment to reduce sugar content ('the treatment') is to remove sugar from a must by membrane coupling linking microfiltration or ultrafiltration to nanofiltration or reverse osmosis.

Requirements:

- (1) The treatment induces a reduction in volume as a function of the quantity of the sugar content of the sugar solution removed from the initial must.
- (2) The processes must allow the content of must constituents other than the sugars to be preserved.
- (3) The reduction in sugar content of musts excludes the correction of the alcohol content of wines which are derived from them.
- (4) The treatment must not be used in conjunction with one of the enrichment operations provided for in Part I of Annex VIII to Regulation (EU) No 1308/2013.
- (5) The treatment is carried out on a volume of must determined as a function of the sugar content reduction objective being sought.
- (6) The objective of the first stage is to render the must suitable for the second stage of concentration and to preserve the macromolecules greater in size than the membrane's cut-off threshold. This stage may be carried out by ultrafiltration.
- (7) The permeate obtained during the first stage of treatment is then concentrated by nanofiltration or by reverse osmosis.
The original water and the organic acids not retained by nanofiltration in particular may be reintroduced in the treated must.
- (8) The treatment must be carried out under the responsibility of an oenologist or qualified technician.
- (9) The membranes used must comply with the requirements of Regulation (EC) No 1935/2004 and Regulation (EU) No 10/2011 and with the national provisions adopted for the implementation thereof. They must comply with the requirements of the International Oenological Codex published by the OIV.

▼B*Appendix 10***Requirements for the treatment of wines using a membrane technology coupled with activated carbon to reduce excess 4-ethylphenol and 4-ethylguaiacol**

The aim of the treatment is to reduce the content of 4-ethylphenol and 4-ethylguaiacol of microbial origin that constitutes organoleptic defects and masks the aromas of the wine.

Requirements:

- (1) The treatment is to be carried out under the responsibility of an oenologist or qualified technician.
- (2) ► **M3** ————— ◀
- (3) The membranes used must comply with the requirements of Regulations (EC) No 1935/2004 and (EU) No 10/2011 and with the national provisions adopted for the implementation thereof. They must comply with the requirements of the International Oenological Codex published by the OIV.



PART B

THE MAXIMUM SULPHUR DIOXIDE CONTENT OF WINES

A. THE SULPHUR DIOXIDE CONTENT OF WINES

1. The total sulphur dioxide content of wines, other than sparkling wines and liqueur wines, on their release to the market for direct human consumption, may not exceed:
 - (a) 150 milligrams per litre for red wines;
 - (b) 200 milligrams per litre for white and rosé wines.
2. Notwithstanding points 1(a) and (b), the maximum sulphur dioxide content shall be raised, as regards wines with a sugar content, expressed as the sum of glucose and fructose, of not less than five grams per litre, to:
 - (a) 200 milligrams per litre for red wines;
 - (b) 250 milligrams per litre for white and rosé wines;
 - (c) 300 milligrams per litre for:
 - wines entitled to the description ‘Spätlese’ in accordance with Union provisions,
 - white wines entitled to one of the following protected designations of origin: Bordeaux supérieur, Graves de Vayres, Côtes de Bordeaux-Saint-Macaire for the wines so-called ‘moelleux’, Premières Côtes de Bordeaux, Côtes de Bergerac, Côtes de Montravel, Gaillac followed by the terms ‘doux’ or ‘vendanges tardives’, Rosette and Savennières,
 - white wines entitled to the protected designations of origin Allela, Navarra, Penedès, Tarragona and Valencia and wines entitled to a protected designation of origin from the Comunidad Autónoma del País Vasco and described as ‘vendimia tardía’,
 - sweet wines entitled to the protected designation of origin ‘Binissalem-Mallorca’,
 - wines produced from overripe grapes and from raisined grapes entitled to the protected designation of origin ‘Málaga’ with a residual sugar content equal to or more than 45 g/l,
 - wines originating in the United Kingdom produced in accordance with UK legislation where the sugar content is more than 45 g/l,
 - wines from Hungary bearing the protected designation of origin ‘Tokaji’ and described in accordance with Hungarian provisions as ‘Tokaji édes szamorodni’ or ‘Tokaji száraz szamorodni’,
 - wines entitled to one of the following protected designations of origin: Loazzolo, Alto Adige and Trentino described by the terms or one of the terms: ‘passito’ or ‘vendemmia tardiva’,
 - wines entitled to the protected designation of origin: ‘Colli orientali del Friuli’ accompanied by the term ‘Picolit’,
 - wines entitled to the protected designations of origin ‘Moscato di Pantelleria naturale’ and ‘Moscato di Pantelleria’,
 - wines from the Czech Republic entitled to the description ‘pozdní sběr’,
 - wines from Slovakia entitled to a protected designation of origin and described by the term ‘neskorý zber’ and Slovak ‘Tokaj’ wines entitled to the protected designation of origin ‘Tokajské samorodné suché’ or ‘Tokajské samorodné sladké’,

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- white wines with the following protected geographical indications, with a total alcoholic strength by volume of more than 15 % vol. and a sugar content of more than 45 g/l:
 - Franche-Comté,
 - Coteaux de l'Auxois,
 - Saône-et-Loire,
 - Ardèche,
 - Collines rhodaniennes,
 - Comté Tolosan,
 - Côtes de Gascogne,
 - Gers,
 - Côtes du Lot,
 - Côtes du Tarn,
 - Vins de la Corrèze,
 - Ile de Beauté,
 - Pays d'Oc,
 - Côtes de Thau,
 - Val de Loire,
 - Méditerranée,
 - Comtés rhodaniens,
 - Côtes de Thongue,
 - Côte Vermeille,
 - Agenais,
 - Landes,
 - Vins des Allobroges,
 - Var,

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- white wines with the following protected geographical indications, with a total alcoholic strength by volume of more than 15 % vol. and a sugar content of more than 45 g/l:
 - Franche-Comté,
 - Coteaux de l'Auxois,
 - Saône-et-Loire,
 - Coteaux de l'Ardèche,
 - Collines rhodaniennes,
 - Comté Tolosan,
 - Côtes de Gascogne,
 - Gers,

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- Lot,
- Côtes du Tarn,
- Corrèze,
- Ile de Beauté,
- Oc,
- Thau,
- Val de Loire,
- Méditerranée,
- Comtés rhodaniens,
- Côtes de Thongue,
- Côte Vermeille,
- Agenais,
- Landes,
- Allobrogie,
- Var,
- sweet wines originating in Greece with an actual alcoholic strength by volume equal to or more than 15 % vol. and a sugar content equal to or more than 45 g/l and entitled to one of the following protected geographical indications:
 - Άγιο Όρος (Mount Athos — Holy Mount Athos — Holy Mountain Athos — Mont Athos — Άγιο Όρος Άθως),
 - Αργολίδα (Argolida),
 - Αχαΐα (Achaia),
 - Επανομή (Epanomi),
 - Κυκλάδες (Cyclades),
 - Λακωνία (Lakonia),
 - Πιερία (Pieria),
 - Τύρναβος (Tyrnavos),
 - Φλώρινα (Florina),
- sweet wines originating in Cyprus with an actual alcoholic strength by volume equal to or less than 15 % vol. and a sugar content equal to or more than 45 g/l and entitled to the protected designation of origin Κουμανδαρία (Commandaria),
- sweet wines originating in Cyprus produced from overripe grapes or from raisined grapes with a total alcoholic strength by volume equal to or more than 15 % vol. and a sugar content equal to or more than 45 g/l and entitled to one of the following protected geographical indications:
 - Τοπικός Οίνος Λεμεσός (Regional wine of Lemesos),
 - Τοπικός Οίνος Πάφος (Regional wine of Pafos),

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- Τοπικός Οίνος Λάρνακα (Regional wine of Larnaka),
 - Τοπικός Οίνος Λευκωσία (Regional wine of Lefkosia),
 - wines originating in Malta with a total alcoholic strength by volume greater than or equal to 13,5 % vol. and a sugar content greater than or equal to 45 g/l and entitled to the protected designation of origin ‘Malta’ and ‘Gozo’,
 - wines from Croatia entitled to a protected designation of origin and described by the term ‘kvalitetno vino KZP — desertno vino’ or ‘vrhunsko vino KZP — desertno vino’ where the sugar content is more than 50 g/l or ‘vrhunsko vino KZP — kasna berba’;
 - wines from raisined grapes bearing the protected designation of origin ‘Ponikve’, where the sugar content is more than 50 g/l,
 - wines bearing the protected designation of origin ‘Muškat momjanski/Moscato di Momiano’ described by the terms ‘kvalitetno vino KZP — desertno vino’ or ‘vrhunsko vino KZP — desertno vino’ where the sugar content is more than 50 g/l;
- (d) 350 milligrams per litre for:
- wines entitled to the description ‘Auslese’ in accordance with Union provisions,
 - Romanian white wines entitled to one of the following protected designations of origin: Murfatlar, Cotnari, Târnave, Pietroasa, Valea Călugărească,
 - wines from the Czech Republic entitled to the description ‘výběr z hroznů’,
 - wines from Slovakia entitled to a protected designation of origin and described by the term ‘výber z hrozna’ and Slovak ‘Tokaj’ wines entitled to the protected designation of origin ‘Tokajský másláš’ or ‘Tokajský forditáš’,
 - wines from Slovenia entitled to a protected designation of origin and described by the term ‘vrhunsko vino ZGP — izbor’,
 - wines entitled to the traditional expression ‘Késői szüretelésű bor’,
 - wines from Italy of the ‘aleatico’ type entitled to the protected designation of origin ‘Pergola’ and the traditional expression ‘passito’,
 - wines from Croatia entitled to a protected designation of origin and described by the term ‘vrhunsko vino KZP — izborna berba’,
 - wines from Hungary entitled to a protected designation of origin and described in accordance with Hungarian provisions as ‘Válogatott szüretelésű bor’ or ‘Főbor’;
- (e) 400 milligrams per litre for:
- wines entitled to the descriptions ‘Beerenauslese’, ‘Ausbruch’, ‘Ausbruchwein’, ‘Trockenbeerenauslese’, ‘Strohwein’, ‘Schilfwein’ and ‘Eiswein’ in accordance with Union provisions,

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- white wines entitled to one of the following protected designations of origin: Sauternes, Barsac, Cadillac, Cérons, Loupiac, Sainte-Croix-du-Mont, Monbazillac, Bonnezeaux, Quarts de Chaume, Coteaux du Layon, Coteaux de l'Aubance, Graves Supérieures, Sainte-Foy Bordeaux, Haut-Montravel, Saussignac, Jurançon except where followed by the term 'sec', Anjou-Coteaux de la Loire, Coteaux du Layon followed by the name of the commune of origin, Chaume, Coteaux de Saumur, Coteaux du Layon followed by the term premier cru and completed by the complementary geographical denomination Chaume, Pacherenc du Vic Bilh except where followed by the term 'sec', Alsace et Alsace grand cru followed by the term 'vendanges tardives' or 'sélection de grains nobles',
- sweet wines originating in Greece produced from overripe grapes and from raisined grapes with a residual sugar content, expressed as sugar, equal to or more than 45 g/l and entitled to one of the following protected designations of origin:
 - Δαφνές (Dafnes),
 - Λήμνος (Limnos),
 - Malvasia Πάρου (Malvasia Paros),
 - Malvasia Σητείας (Malvasia Sitia),
 - Malvasia Χάνδακας — Candia,
 - Μονεμβασία- Malvasia (Monemvasia — Malvasia),
 - Μοσχάτος Κεφαλληνίας (Muscat of Kefalonia — Muscat de Céphalonie),
 - Μοσχάτος Λήμνου (Muscat of Limnos),
 - Μοσχάτο Πατρών (Muscat of Patra),
 - Μοσχάτος Ρίου Πάτρας (Muscat of Rio Patra),
 - Μοσχάτος Ρόδου (Muscat of Rodos),
 - Νεμέα (Nemea),
 - Σάμος (Samos),
 - Σαντορίνη (Santorini),
 - Σητεία (Sitia),

and sweet wines originating in Greece produced from overripe grapes and from raisined grapes entitled to one of the following protected geographical indications:

 - Άγιο Όρος (Mount Athos — Holy Mount Athos — Holy Mountain Athos — Mont Athos — Άγιο Όρος Άθως),
 - Αιγαίο Πέλαγος (Aegean Sea — Aigaiο Pelagos),
 - Δράμα (Drama),
 - Ηράκλειο (Iraklio),
 - Καστοριά (Kastoria),
 - Κρήτη (Crete),
 - Μακεδονία (Macedonia),
 - Ρέθυμνο (Rethimno),
 - Σιάτιστα (Siatista),
 - Στερεά Ελλάδα (Sterea Ellada),
 - Χανιά (Chania),
- wines from the Czech Republic entitled to the descriptions 'výběr z bobulí', 'výběr z cibéb', 'ledové víno' or 'slámové víno',

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- wines from Slovakia entitled to a protected designation of origin and described by the terms ‘bobuľový výber’, ‘hroziakový výber’, ‘cibébový výber’, ‘ľadové víno’ or ‘slamové víno’ and Slovak ‘Tokaj’ wines entitled to the protected designation of origin ‘Tokajský výber’, ‘Tokajská esencia’ or ‘Tokajská výberová esencia’,
- wines from Hungary entitled to a protected designation of origin and described in accordance with Hungarian provisions as ‘Tokaji másolás’, ‘Tokaji fordítás’, ‘Tokaji aszúeszencia’, ‘Tokaji eszencia’, ‘Tokaji aszú’ or ‘Töppedt szőlőből készült bor’ or ‘Jégbor’,
- wines entitled to the protected designation of origin ‘Albana di Romagna’ and described by the term ‘passito’,
- Luxembourg wines entitled to a protected designation of origin and described by the terms ‘vendanges tardives’, ‘vin de glace’ or ‘vin de paille’,
- wines from Portugal entitled to a protected designation of origin or a protected geographical indication and to the statement ‘colheita tardia’,

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- wines from Slovenia entitled to a protected designation of origin and described by the terms ‘vrhunsko vino ZGP – jagodni izbor’, ‘vrhunsko vino ZGP – ledeno vino’, ‘vrhunsko vino ZGP – suhi jagodni izbor’ or ‘vrhunsko vino ZGP – slamno vino (vino iz sušenega grozdja)’,

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- wines originating in Canada entitled to the description ‘Icewine’,
- wines from Croatia entitled to a protected designation of origin and described by the term ‘vrhunsko vino KZP — izborna berba bobica’, ‘vrhunsko vino KZP — izborna berba prosušenih bobica’ or ‘vrhunsko vino KZP — ledeno vino’.

3. The lists of wines bearing a protected designation of origin or a protected geographical indication set out in points 2(c), (d) and (e) may be amended to include new wines or where the production conditions of the wines are amended or the designation of origin or geographical indication is changed. Member States shall send a request for derogation to the Commission in accordance with Commission Delegated Regulation (EU) 2017/1183 and provide all the necessary technical information for the wines concerned, including their product specifications and the annual quantities produced.
4. In years when climatic conditions make this exceptionally necessary, Member States may authorise an increase of a maximum of 50 milligrams per litre in the maximum total sulphur dioxide levels of less than 300 milligrams per litre for wines produced in certain wine-growing areas within their territory. Member States shall notify those derogations within one month following the granting of the derogation to the Commission in accordance with Delegated Regulation (EU) 2017/1183 by specifying the year, the wine growing areas and the wines concerned and providing evidence indicating that the climatic conditions make the increase necessary. The Commission shall then publish the derogation on its website.
5. Member States may apply more restrictive provisions to wines produced within their territory.

B. THE SULPHUR DIOXIDE CONTENT OF LIQUEUR WINES

The total sulphur dioxide content of liqueur wines, on their release to the market for direct human consumption, may not exceed:

- (a) 150 mg/l where the sugar content is less than 5 g/l;
- (b) 200 mg/l where the sugar content is not less than 5 g/l.

▼B**C. THE SULPHUR DIOXIDE CONTENT OF SPARKLING WINES**

1. The total sulphur dioxide content of sparkling wines, on their release to the market for direct human consumption, may not exceed:
 - (a) 185 mg/l for all categories of quality sparkling wine; and
 - (b) 235 mg/l for other sparkling wines.
2. Where climate conditions make this necessary in certain wine-growing areas of the Union, the Member States concerned may authorise an increase of up to 40 mg/l in the maximum total sulphur dioxide content for the sparkling wines referred to in point 1(a) and (b) produced in their territory, provided that the wines covered by this authorisation are not sent outside the Member State in question.

PART C**THE MAXIMUM VOLATILE ACID CONTENT OF WINES**

1. The volatile acid content may not exceed:
 - (a) 18 milliequivalents per litre for partially fermented grape must;
 - (b) 18 milliequivalents per litre for white and rosé wines; or
 - (c) 20 milliequivalents per litre for red wines.
2. The levels referred to in point 1 shall apply:
 - (a) to products from grapes harvested within the Union, at the production stage and at all stages of marketing;
 - (b) to partially fermented grape must and wines originating in third countries, at all stages following their entry into the geographical territory of the Union.
3. Member States may grant derogations from the limits set out in point 1:
 - (a) for certain wines bearing a protected designation of origin or a protected geographical indication:
 - where they have been aged for a period of at least two years, or
 - where they have been produced according to particular methods;
 - (b) for wines with a total alcoholic strength by volume of at least 13 % vol.

Member States shall notify those derogations to the Commission in accordance with Delegated Regulation (EU) 2017/1183 and within one month following the date of granting the derogation. The Commission shall then make public the derogation on its website.

PART D**LIMITS AND CONDITIONS FOR THE SWEETENING OF WINES**

1. The sweetening of wine may be authorised only if carried out using one or more of the following products:
 - (a) grape must;
 - (b) concentrated grape must;
 - (c) rectified concentrated grape must.

The total alcoholic strength by volume of the wine in question may not be increased by more than 4 % vol.

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2. The sweetening of imported wines intended for direct human consumption and bearing a geographical indication is forbidden within the territory of the Union. The sweetening of other imported wines shall be subject to the same conditions as wines produced in the Union.
3. The sweetening of a wine bearing a protected designation of origin may be authorised by a Member State only if it is carried out:
 - (a) in accordance with the conditions and limits laid down in this Annex;
 - (b) within the region in which the wine was produced or within an area in immediate proximity.

The grape must and concentrated grape must referred to in point 1 must originate in the same region as the wine for the sweetening of which it is used.

4. The sweetening of wines shall be authorised only at the production and wholesale stages.

*ANNEX II***AUTHORISED OENOLOGICAL PRACTICES AND RESTRICTIONS
APPLICABLE TO SPARKLING WINES, QUALITY SPARKLING
WINES AND QUALITY AROMATIC SPARKLING WINES****A. Sparkling wine**

1. For the purposes of this point and Sections B and C of this Annex:
 - (a) 'tirage liqueur' means the product added to the cuvée to provoke secondary fermentation;
 - (b) 'expedition liqueur' means the product added to sparkling wines to give them special taste qualities.
2. The expedition liqueur may contain only:
 - sucrose,
 - grape must,
 - grape must in fermentation,
 - concentrated grape must,
 - rectified concentrated grape must,
 - wine, or
 - a mixture thereof,with the possible addition of wine distillate.
3. Without prejudice to enrichment authorised pursuant to Regulation (EU) No 1308/2013 for the constituents of a cuvée, any enrichment of the cuvée shall be prohibited.
4. However, each Member State may, in respect of regions and varieties for which it is technically justified, authorise the enrichment of the cuvée at the place of preparation of the sparkling wines provided that:
 - (a) none of the constituents of the cuvée has previously undergone enrichment;
 - (b) the said constituents are derived solely from grapes harvested in its territory;
 - (c) the enrichment is carried out in a single operation;
 - (d) the following limits are not exceeded:
 - (i) 3 % vol. for a cuvée comprising constituents from wine-growing zone A;
 - (ii) 2 % vol. for a cuvée comprising constituents from wine-growing zone B;
 - (iii) 1,5 % vol. for a cuvée comprising constituents from wine-growing zone C;
 - (e) the method used is the addition of sucrose, concentrated grape must or rectified concentrated grape must.
5. The addition of tirage liqueur and expedition liqueur shall be considered neither as enrichment nor as sweetening. The addition of tirage liqueur may not cause an increase in the total alcoholic strength by volume of the cuvée of more than 1,5 % vol. This increase shall be measured by calculating the difference between the total alcoholic strength by volume of the cuvée and the total alcoholic strength by volume of the sparkling wine before any expedition liqueur is added.
6. The addition of expedition liqueur shall be carried out in such a way as not to increase the actual alcoholic strength by volume of the sparkling wine by more than 0,5 % vol.
7. Sweetening of the cuvée and its constituents shall be prohibited.

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8. In addition to any acidification or deacidification of the constituents of the cuvée in accordance with Regulation (EU) No 1308/2013, the cuvée may be subject to acidification or deacidification. Acidification and deacidification of the cuvée shall be mutually exclusive. Acidification may be carried out only up to a maximum of 1,5 grams per litre, expressed as tartaric acid, i.e. 20 milliequivalents per litre.
9. In years of exceptional climate conditions, the maximum limit of 1,5 grams per litre or 20 milliequivalents per litre may be raised to 2,5 grams per litre or 34 milliequivalents per litre, provided that the natural acidity of the products is not less than 3 g/l, expressed as tartaric acid, or 40 milliequivalents per litre.
10. The carbon dioxide contained in the sparkling wines may be produced only as a result of the alcoholic fermentation of the cuvée from which such wine is prepared.

Such fermentation, unless it is intended for processing grapes, grape must or partially fermented grape must directly into sparkling wine, may result only from the addition of tirage liqueur. It may take place only in bottles or in closed tanks.

The use of carbon dioxide in the case of the process of transfer by counter-pressure is authorised under supervision and on condition that the inevitable gaseous exchanges with the carbon dioxide from the alcoholic fermentation of the cuvée do not increase the pressure of carbon dioxide contained in sparkling wines.

11. In the case of sparkling wines other than sparkling wines bearing a protected designation of origin:
 - (a) the tirage liqueur intended for their preparation may contain only:
 - grape must,
 - grape must in fermentation,
 - concentrated grape must,
 - rectified concentrated grape must, or
 - sucrose and wine;
 - (b) the actual alcoholic strength by volume, including the alcohol contained in any expedition liqueur added, shall be not less than 9,5 % vol.

B. Quality sparkling wine

1. The tirage liqueur intended for the production of a quality sparkling wine may contain only:
 - (a) sucrose;
 - (b) concentrated grape must;
 - (c) rectified concentrated grape must;
 - (d) grape must or partially fermented grape must; or
 - (e) wine.
2. Producer Member States may define any supplementary or more stringent characteristics or conditions of production and circulation for quality sparkling wines produced in their territory.
3. The manufacture of quality sparkling wines is also covered by the rules referred to in:
 - points 1 to 10 of Section A,
 - point 3 of Section C for the actual alcoholic strength, point 5 of Section C for the minimum excess pressure and points 6 and 7 of Section C for the minimum length of the production process, without prejudice to point 4(d) of Section B of this Annex,

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4. As regards quality aromatic sparkling wines:
- (a) except by way of derogation, these may be obtained only by making exclusive use, when constituting the cuvée, of grape must or partially fermented grape must derived from wine varieties contained in the list given in the Appendix to this Annex. However, quality aromatic sparkling wine may be produced in the traditional way by using, as constituents of the cuvée, wines obtained from grapes of the 'Glera' variety harvested in the regions of Veneto and Friuli-Venezia Giulia;
 - (b) control of the fermentation process before and after the cuvée has been constituted, in order to render the cuvée sparkling, may be effected only by refrigeration or other physical processes;
 - (c) the addition of expedition liqueur shall be prohibited;
 - (d) the length of the production process for quality aromatic sparkling wines may not be less than one month.
- C. Sparkling wines and quality sparkling wines bearing a protected designation of origin**
1. The total alcoholic strength by volume of the cuvées intended for the preparation of quality sparkling wines bearing a protected designation of origin shall be not less than:
 - 9,5 % vol. in wine-growing zones C III,
 - 9 % vol. in other wine-growing zones.
 2. However, the cuvées intended for the preparation of quality sparkling wines with the protected designations of origin 'Prosecco', 'Conegliano Valdobbiadene — Prosecco' and 'Colli Asolani — Prosecco' or 'Asolo — Prosecco' and prepared from a single vine variety may have a total alcoholic strength by volume of not less than 8,5 % vol.
 3. The actual alcoholic strength by volume of quality sparkling wines bearing a protected designation of origin, including the alcohol contained in any expedition liqueur added, shall be not less than 10 % vol.
 4. The tirage liqueur for sparkling wines and quality sparkling wines bearing a protected designation of origin may contain only:
 - (a) sucrose;
 - (b) concentrated grape must;
 - (c) rectified concentrated grape must;
 and:
 - (a) grape must;
 - (b) partially fermented grape must;
 - (c) wine;
 suitable for yielding the same sparkling wine or quality sparkling wine bearing a protected designation of origin as that to which the tirage liqueur is added.
 5. Notwithstanding point 5(c) of Part II of Annex VII to Regulation (EU) No 1308/2013, when kept at a temperature of 20 °C in closed containers of a capacity of less than 25 cl., quality sparkling wines with a protected designation of origin must have an excess pressure of not less than 3 bar.
 6. The duration of the process of making quality sparkling wines bearing a protected designation of origin, including ageing in the undertaking where they are made and reckoned from the start of the fermentation process designed to make the wines sparkling, may not be less than:
 - (a) six months where the fermentation process designed to make the wines sparkling takes place in closed tanks;

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- (b) nine months where the fermentation process designed to make the wines sparkling takes place in the bottles.
7. The duration of the fermentation process designed to make the cuvée sparkling and the duration of the presence of the cuvée on the lees shall not be less than:
- 90 days,
 - 30 days if the fermentation takes place in containers with stirrers.
8. The rules laid down in points 1 to 10 of Section A and point 2 of Section B shall also apply to sparkling wines and quality sparkling wines bearing a protected designation of origin.
9. As regards quality aromatic sparkling wines bearing a protected designation of origin:
- (a) these wines may be obtained solely by using, for constituting the cuvée, grape must or partially fermented grape must of vine varieties on the list given in the Appendix to this Annex, provided that these varieties are recognised as suitable for the production of quality sparkling wines bearing a protected designation of origin in the region whose name the quality sparkling wines bearing a protected designation of origin bear. By derogation, a quality aromatic sparkling wine bearing a protected designation of origin may be produced by using, as constituents of the cuvée, wines obtained from grapes of the 'Glera' vine variety harvested in the regions of the designations of origin 'Prosecco', 'Conegliano-Valdobbiadene — Prosecco', 'Colli Asolani — Prosecco' and 'Asolo — Prosecco';
 - (b) control of the fermentation process before and after the cuvée has been constituted, in order to render the cuvée sparkling, may be effected only by refrigeration or other physical processes;
 - (c) the addition of expedition liqueur shall be prohibited;
 - (d) the actual alcoholic strength by volume of quality aromatic sparkling wines bearing a protected designation of origin may not be less than 6 % vol.;
 - (e) the total alcoholic strength by volume of quality aromatic sparkling wines bearing a protected designation of origin may not be less than 10 % vol.;
 - (f) when kept at a temperature of 20 °C in closed containers, quality aromatic sparkling wines bearing a protected designation of origin must have an excess pressure of not less than 3 bar;
 - (g) notwithstanding point 6 of this Section, the duration of the process of producing quality aromatic sparkling wines bearing a protected designation of origin must not be less than one month.

▼ B*Appendix***List of wine grape varieties which may be used to constitute the cuvée for preparing quality aromatic sparkling wines and quality sparkling wines bearing a protected designation of origin**

Albariño	Macabeu B
Aleatico N	Toutes les Malvasías
Alvarinho	All the Malvoisies
Ασύρτικο (Assyrtiko)	Mauzac blanc and rosé
Bourboulenc B	Monica N
Brachetto N.	Tous les Moscateles
Busuioacă de Bohotin	Μοσχοφίλερο (Moschofilero)
Clairette B	Müller-Thurgau B
Colombard B	All the Muscatels
Csaba gyöngye B	Manzoni moscato
Cserszegi fűszeres B	Nektár
Devín	Pálava B
Fernão Pires	Parellada B
Freisa N	Perle B
Gamay N	Piquepoul B
Gewürztraminer Rs	Poulsard
Girò N	Ροδίτης (Roditis)
Glera	Scheurebe
Γλυκερόθρα (Glykerythra)	Tămâioasă românească
Huxelrebe	Torbato
Irsai Olivér B	Touriga Nacional
Macabeo B	Verdejo
	Zefír B

▼B*ANNEX III***AUTHORISED OENOLOGICAL PRACTICES AND RESTRICTIONS APPLICABLE TO LIQUEUR WINES AND LIQUEUR WINES BEARING A PROTECTED DESIGNATION OF ORIGIN OR PROTECTED GEOGRAPHICAL INDICATION****A. Liqueur wines**

1. The products referred to in point (3)(c) of Part II of Annex VII to Regulation (EU) No 1308/2013 and used for preparing liqueur wines and liqueur wines bearing a protected designation of origin or a protected geographical indication may only have undergone, where appropriate, the oenological practices and processes referred to in either Regulation (EU) No 1308/2013 or this Regulation.
2. However,
 - (a) the increase in natural alcoholic strength by volume may only arise from the use of the products referred to in points (3)(e) and (f) of Part II of Annex VII to Regulation (EU) No 1308/2013; and
 - (b) by derogation, Spain is authorised to permit the use of calcium sulphate for Spanish wines described by the traditional terms ‘vino generoso’ or ‘vino generoso de licor’ where this practice is traditional and provided that the sulphate content of the product so treated is not more than 2,5 g/l, expressed as potassium sulphate. These products may undergo additional acidification up to a maximum limit of 1,5 g/l.
3. Without prejudice to any provisions of a more restrictive nature which the Member States may adopt for liqueur wines and liqueur wines bearing a protected designation of origin or a protected geographical indication prepared within their territory, the oenological practices referred to in Regulation (EU) No 1308/2013 and in this Regulation shall be authorised for those products.
4. The following are also authorised:
 - (a) sweetening, subject to a declaration and registration requirement, where the products used have not been enriched with concentrated grape must, by means of:
 - concentrated grape must or rectified concentrated grape must, provided that the increase in the total alcoholic strength by volume of the wine in question is not more than 3 % vol.,

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- concentrated grape must, concentrated grape must obtained by the action of direct heat, complying, with the exception of this operation, with the definition of concentrated grape must, rectified concentrated grape must or must from raisined grapes to which neutral alcohol of vine origin has been added to prevent fermentation, for Spanish wine described by the traditional expression ‘vino generoso de licor’ and provided that the increase in the total alcoholic strength by volume of the wine in question is not greater than 8 % vol.,

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- concentrated grape must or rectified concentrated grape must for liqueur wines bearing the protected designation of origin ‘Madeira’ and provided that the increase in the total alcoholic strength by volume of the wine in question is not more than 8 % vol.;
- (b) the addition of alcohol, distillate or spirits, as referred to in points (3)(e) and (f) of Part II of Annex VII to Regulation (EU) No 1308/2013, in order to compensate for losses due to evaporation during ageing;
 - (c) ageing in vessels at a temperature not exceeding 50 °C, for liqueur wines bearing the protected designation of origin ‘Madeira’.
5. The vine varieties from which the products referred to in point (3)(c) of Part II of Annex VII to Regulation (EU) No 1308/2013 used for the preparation of liqueur wines and liqueur wines bearing a protected designation of origin or a protected geographical indication are produced shall be selected from those referred to in Article 81(2) of Regulation (EU) No 1308/2013.

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6. The natural alcoholic strength by volume of the products referred to in point (3)(c) of Part II of Annex VII to Regulation (EU) No 1308/2013 used for the preparation of a liqueur wine other than a liqueur wine bearing a protected designation of origin or a protected geographical indication may not be less 12 % vol.

B. Liqueur wines bearing a protected designation of origin (provisions other than those laid down in Section A of this Annex and concerning specifically liqueur wines bearing a protected designation of origin)

1. The list of liqueur wines bearing a protected designation of origin the production of which involves the use of grape must or the mixture of grape must with wine, referred to in the fourth indent of point (3)(c) of Part II of Annex VII to Regulation (EU) No 1308/2013, is set out in Section A of Appendix 1 to this Annex.
2. The list of liqueur wines bearing a protected designation of origin to which the products referred to in point (3)(f) of Part II of Annex VII to Regulation (EU) No 1308/2013 may be added is given in Section B of Appendix 1 to this Annex.
3. The products referred to in point (3)(c) of Part II of Annex VII to Regulation (EU) No 1308/2013 and concentrated grape must and partially fermented grape must obtained from raisined grapes referred to in point (3)(f)(iii) of that Part II of Annex VII used for the preparation of liqueur wine bearing a protected designation of origin must come from the region whose name the liqueur wine bearing a protected designation of origin in question bears.

▼M3

However, as concerns liqueur wines bearing the protected designation of origin ‘Condado de Huelva’, ‘Málaga’ and ‘Jerez-Xérès-Sherry’, the must of raisined grapes to which neutral alcohol of vine origin has been added to prevent fermentation, obtained from the Pedro Ximénez vine variety, may come from the ‘Montilla-Moriles’ region.

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4. The operations referred to in points 1 to 4 of Section A of this Annex for the preparation of a liqueur wine bearing a protected designation of origin may be performed only within the region referred to in point 3.

However, as regards the liqueur wine bearing a protected designation of origin for which the designation ‘Porto’ is reserved for the product prepared from grapes obtained from the region delimited as the ‘Douro’, the additional manufacturing and ageing processes may take place either in the aforementioned region or in Vila Nova de Gaia — Porto.

5. Without prejudice to any provisions of a more restrictive nature which the Member States may adopt for liqueur wines bearing a protected designation of origin prepared within their territory:
 - (a) the natural alcoholic strength by volume of the products referred to in point (3)(c) of Part II of Annex VII to Regulation (EU) No 1308/2013 used for the preparation of a liqueur wine bearing a protected designation of origin may not be less than 12 % vol. However, some liqueur wines bearing a protected designation of origin on one of the lists given in Section A of Appendix 2 to this Annex may be obtained from:
 - (i) grape must with a natural alcoholic strength by volume of not less than 10 % vol. in the case of liqueur wines bearing a protected designation of origin obtained by the addition of spirit obtained from wine or grape marc with a designation of origin, possibly from the same holding; or
 - (ii) partially fermented grape must or, in the case of the second indent below, from wine with an initial natural alcoholic strength by volume of not less than:
 - 11 % vol. in the case of liqueur wines bearing a protected designation of origin obtained by the addition of neutral alcohol, or of a distillate of wine with an actual alcoholic strength by volume of not less than 70 % vol., or of spirit of vinous origin,

▼B

- 10,5 % vol. for wines prepared from white grape must referred to in list 3 given in Section A of Appendix 2,
 - 9 % vol. in the case of a Portuguese liqueur wine bearing the protected designation of origin ‘Madeira’, the production of which is traditional and customary in accordance with the national legislation, which makes express provision for such a wine;
- (b) the list of liqueur wines bearing a protected designation of origin having, notwithstanding point (3)(b) of Part II of Annex VII to Regulation (EU) No 1308/2013, a total alcoholic strength by volume of less than 17,5 % vol. but not less than 15 % vol., where national legislation applicable thereto before 1 January 1985 expressly so provides, is given in Section B of Appendix 2.
6. The specific, traditional terms ‘οίνος γλυκός φυσικός’, ‘vino dulce natural’, ‘vino dolce naturale’ and ‘vinho doce natural’ shall be used only for liqueur wines bearing a protected designation of origin:
- obtained from harvests at least 85 % of which are of the vine varieties listed in Appendix 3,
 - derived from musts with an initial natural sugar content of at least 212 grams per litre,
 - obtained by adding alcohol, distillate or spirits, as referred to in points (3)(e) and (f) of Part II of Annex VII to Regulation (EU) No 1308/2013 to the exclusion of any other enrichment.
7. Insofar as is necessary to conform to traditional production practices, Member States may, for liqueur wines bearing a protected designation of origin produced within their territory, stipulate that the specific traditional name ‘vin doux naturel’ is used only for liqueur wines bearing a protected designation of origin which are:
- made directly by producers harvesting the grapes and exclusively from their harvests of Muscatel, Grenache, Maccabeo or Malvoisie grapes; however, harvests which have been obtained from vineyards that are also planted with vine varieties other than the four indicated above may be included provided these do not constitute more than 10 % of the total stock,
 - obtained within the limit of a yield per hectare of 40 hl of grape must referred to in the first and fourth indents of point (3)(c) of Part II of Annex VII to Regulation (EU) No 1308/2013, any greater yield resulting in the entire harvest ceasing to be eligible for the description ‘vin doux naturel’,
 - derived from a grape must as referred to above with an initial natural sugar content of at least 252 grams per litre,
 - obtained, to the exclusion of any other enrichment, by the addition of alcohol of vinous origin amounting in pure alcohol to a minimum of 5 % of the volume of the grape must as referred to above used and a maximum represented by the lower of the following two proportions:
 - either 10 % of the volume of the abovementioned grape must used, or,
 - 40 % of the total alcoholic strength by volume of the finished product represented by the sum of the actual alcoholic strength by volume and the equivalent of the potential alcoholic strength by volume calculated on the basis of 1 % vol. of pure alcohol for 17,5 grams of residual sugar per litre.
8. In the case of liqueur wines, the specific traditional name ‘vino generoso’ shall be used only for dry liqueur wines bearing a protected designation of origin developed totally or partly under flor and:
- obtained only from white grapes obtained from the Palomino de Jerez, Palomino fino, Pedro Ximénez, Verdejo, Zalema and Garrido Fino vine varieties,
 - released to the market after it has been matured for an average of two years in oak barrels.

▼B

Development under flor as referred to in the first subparagraph means the biological process which, occurring when a film of typical yeasts develops spontaneously at the free surface of the wine after total alcoholic fermentation of the must, gives the product specific analytic and organoleptic characteristics.

9. The specific traditional name ‘vinho generoso’ shall be used only for liqueur wines with the protected designations of origin ‘Porto’, ‘Madeira’, ‘Moscatel de Setubal’ and ‘Carcavelos’ in association with the respective designation of origin.
10. The specific traditional name ‘vino generoso de licor’ shall be used only for liqueur wines bearing a protected designation of origin:
 - obtained from ‘vino generoso’, as referred to in point 8, or from wine under flor capable of producing such a ‘vino generoso’, to which has been added either must of raisined grapes to which neutral alcohol of vine origin has been added to prevent fermentation, or rectified concentrated grape must or ‘vino dulce natural’,
 - released to the market after it has been matured for an average of two years in oak barrels.

▼ B*Appendix 1***List of liqueur wines bearing a protected designation of origin the production of which involves special rules****A. LIST OF LIQUEUR WINES BEARING A PROTECTED DESIGNATION OF ORIGIN THE PRODUCTION OF WHICH INVOLVES THE USE OF GRAPE MUST OR A MIXTURE THEREOF WITH WINE**

(Point 1 of Section B of this Annex)

GREECE

Σάμος (Samos), Μοσχάτος Πατρών (Muscat of Patra), Μοσχάτος Ρίου Πατρών (Muscat of Rio Patra), Μοσχάτος Κεφαλληνίας (Muscat of Kefalonia/Muscat de Kefhalonia), Μοσχάτος Ρόδου (Muscat of Rodos), Μοσχάτος Λήμνου (Muscat of Limnos), Σητεία (Sitia), Νεμέα (Nemea), Σαντορίνη (Santorini), Δαφνές (Dafnes), Μαυροδάφνη Κεφαλληνίας (Mavrodaphne of Kefalonia), Μαυροδάφνη Πατρών (Mavrodaphni of Patra)

SPAIN

▼ M3

Liqueur wines bearing a protected designation of origin	Description of product as established by Union rules or national legislation
Alicante	Moscatel de Alicante Vino dulce
Cariñena	Vino dulce
Condado de Huelva	Pedro Ximénez Moscatel Mistela Vino dulce
Empordà	Mistela Moscatel
Jerez-Xérès-Sherry	Pedro Ximénez Moscatel
Lebrija	
Málaga	Vino dulce
Montilla-Moriles	Pedro Ximénez Moscatel
Priorato	Vino dulce
Tarragona	Vino dulce
Valencia	Moscatel de Valencia Vino dulce

▼ B

ITALY

Cannonau di Sardegna, Giró di Cagliari, Malvasia di Bosa, Marsala, Moscato di Sorso-Sennori, Moscato di Trani, Nascodi Cagliari, Oltrepó Pavese Moscato, San Martino della Battaglia, Trentino, Vesuvio Lacrima Christi.

▼B

- B. LIST OF LIQUEUR WINES BEARING A PROTECTED DESIGNATION OF ORIGIN THE PRODUCTION OF WHICH INVOLVES THE ADDITION OF THE PRODUCTS REFERRED TO IN POINT (3)(f) OF PART II OF ANNEX VII TO REGULATION (EU) No 1308/2013

(Point 2 of Section B of this Annex)

1. **List of liqueur wines bearing a protected designation of origin the production of which involves the addition of wine alcohol or dried-grape alcohol with an actual alcoholic strength of not less than 95 % vol. and not more than 96 % vol.**

(First indent of point (3)(f)(ii) of Part II of Annex VII to Regulation (EU) No 1308/2013)

GREECE

Σάμος (Samos), Μοσχάτος Πατρών (Muscat of Patra), Μοσχάτος Ρίου Πατρών (Muscat of Rio Patra), Μοσχάτος Κεφαλληνίας (Muscat of Kefalonia/Muscat de Kefalonia), Μοσχάτος Ρόδου (Muscat of Rodos), Μοσχάτος Λήμνου (Muscat of Limnos), Σητεία (Sitia), Σαντορίνη (Santorini), Δαφνές (Dafnes), Μαυροδάφνη Πατρών (Mavrodaphni of Patra), Μαυροδάφνη Κεφαλληνίας (Mavrodaphne of Kefalonia).

SPAIN

Condado de Huelva, Jerez-Xérès-Sherry, Manzanilla-Sanlúcar de Barrameda, Málaga, Montilla-Moriles, Rueda, Terra Alta.

CYPRUS

Κουμανδάρια (Commandaria).

2. **List of liqueur wines bearing a protected designation of origin the production of which involves the addition of spirits distilled from wine or grape marc with an actual alcoholic strength of not less than 52 % vol. and not more than 86 % vol.**

(Second indent of point (3)(f)(ii) of Part II of Annex VII to Regulation (EU) No 1308/2013)

GREECE

Μαυροδάφνη Πατρών (Mavrodaphni of Patra), Μαυροδάφνη Κεφαλληνίας (Mavrodaphne of Kefalonia), Σητεία (Sitia), Σαντορίνη (Santorini), Δαφνές (Dafnes), Νεμέα (Nemea).

FRANCE

Pineau des Charentes or Pineau charentais, Floc de Gascogne, Macvin du Jura.

CYPRUS

Κουμανδάρια (Commandaria).

3. **List of liqueur wines bearing a protected designation of origin the production of which involves the addition of spirits distilled from dried grapes with an alcoholic strength of not less than 52 % vol. but less than 94,5 % vol.**

(Third indent of point (3)(f)(ii) of Part II of Annex VII to Regulation (EU) No 1308/2013)

GREECE

Μαυροδάφνη Πατρών (Mavrodaphni of Patra), Μαυροδάφνη Κεφαλληνίας (Mavrodaphne of Kefalonia).

▼ B

4. **List of liqueur wines bearing a protected designation of origin the production of which involves the addition of partially fermented grape must obtained from raisined grapes**

(First indent of point (3)(f)(iii) of Part II of Annex VII to Regulation (EU) No 1308/2013)

SPAIN

▼ M3

Liqueur wines bearing a protected designation of origin	Description of product as established by Union rules or national legislation
Condado de Huelva	
Jerez-Xérès-Sherry	Vino generoso de licor
Málaga	Vino dulce
Montilla-Moriles	Vino generoso de licor

▼ B

ITALY

Aleatico di Gradoli, Giró di Cagliari, Malvasia delle Lipari, Pantelleria passito

CYPRUS

Κομάνδαρία (Commandaria).

5. **List of liqueur wines bearing a protected designation of origin the production of which involves the addition of concentrated grape must obtained by the action of direct heat, complying, with the exception of this operation, with the definition of concentrated grape must.**

(Second indent of point (3)(f)(iii) of Part II of Annex VII to Regulation (EU) No 1308/2013)

SPAIN

Liqueur wines bearing a protected designation of origin	Description of product as established by Union rules or national legislation
Alicante	
Condado de Huelva	Vino generoso de licor
Empordà	Garnacha/Garnatxa
Jerez-Xérès-Sherry	Vino generoso de licor
Málaga	Vino dulce
Montilla-Moriles	Vino generoso de licor
Navarra	Moscatel

ITALY

Marsala

▼ M3

CYPRUS

Κομάνδαρία (Commandaria).

▼ B

6. **List of liqueur wines bearing a protected designation of origin the production of which involves the addition of concentrated grape must**

(Third indent of point (3)(f)(iii) of Part II of Annex VII to Regulation (EU) No 1308/2013)

▼ B

SPAIN

Liqueur wines bearing a protected designation of origin	Description of product as established by Union rules or national legislation
Málaga	Vino dulce
Montilla-Moriles	Vino dulce Vino generoso de licor
Tarragona	Vino dulce
Jerez-Xerès-Sherry	Vino generoso de licor
Condado de Huelva	Vino generoso de licor

ITALY

Oltrepó Pavese Moscato, Marsala, Moscato di Trani.

▼ M3

CYPRUS

Κουμανδαρία (Commandaria).

▼B*Appendix 2***A. Lists referred to in point 5(a) of Section B of Annex III**

- List of liqueur wines bearing a protected designation of origin produced from grape must with a natural alcoholic strength by volume of not less than 10 % vol. obtained by the addition of spirit obtained from wine or grape marc bearing a protected designation of origin, possibly from the same holding.**

FRANCE

Pineau des Charentes or Pineau charentais, Floc de Gascogne, Macvin du Jura.

- List of liqueur wines bearing a protected designation of origin produced from fermenting grape must with an initial natural alcoholic strength by volume of not less than 11 % vol. obtained by the addition of neutral alcohol or of a distillate of wine with an actual alcoholic strength by volume of not less than 70 % vol., or of spirit of vinous origin.**

PORTUGAL

Porto — Port

Moscatel de Setúbal, Setúbal

Carcavelos

Moscatel do Douro.

ITALY

Moscato di Noto

- List of liqueur wines bearing a protected designation of origin produced from wine with an initial natural alcoholic strength by volume of not less than 10,5 % vol.**

SPAIN

Jerez-Xérès-Sherry

Manzanilla-Sanlúcar de Barrameda

Condado de Huelva

Rueda

ITALY

Trentino

- List of liqueur wines bearing a protected designation of origin obtained from fermenting grape must with an initial natural alcoholic strength by volume of not less than 9 % vol.**

PORTUGAL

Madeira

B. Lists referred to in point 5(b) of Section B of Annex III

List of liqueur wines bearing a protected designation of origin with a total alcoholic strength by volume of less than 17,5 % vol. but not less than 15 % vol., where national laws applicable thereto before 1 January 1985 expressly so provided

(Point (3)(b) of Part II of Annex VII to Regulation (EU) No 1308/2013)

SPAIN

Liqueur wines bearing a protected designation of origin	Description of product as established by Union rules or national legislation
Condado de Huelva	Vino generoso
Jerez-Xérès-Sherry	Vino generoso
Manzanilla-Sanlúcar de Barrameda	Vino generoso

▼B

Liqueur wines bearing a protected designation of origin	Description of product as established by Union rules or national legislation
Málaga	Seco
Montilla-Moriles	Vino generoso
Priorato	Rancio seco
Rueda	Vino generoso
Tarragona	Rancio seco

ITALY

Trentino

PORTUGAL

Liqueur wines bearing a protected designation of origin	Description of product as established by Union rules or national legislation
Porto — Port	Branco leve seco

▼ B*Appendix 3*

List of varieties that may be used to produce liqueur wines bearing a protected designation of origin that bear the specific, traditional terms ‘vino dulce natural’, ‘vino dolce naturale’, ‘vinho doce natural’ and ‘οίνος γλυκός φυσικός’

▼ M3

Muscats – Grenache – Garnacha Blanca – Garnacha Peluda – Listán Blanco – Listán Negro-Negramoll – Maccabéo – Malvoisies – Mavrodaphne – Assirtiko – Liatiko – Garnacha tintorera – Monastrell – Palomino – Pedro Ximénez – Albarola – Aleatico – Bosco – Cannonau – Corinto nero – Giró – Monica – Nasco – Primitivo – Vermentino – Zibibbo – Moscateles – Garnacha – Garnacha roja – Mazuela.