ANNEX I

PART A

AUTHORISED OENOLOGICAL PRACTICES

TABLE 1: AUTHORISED OENOLOGICAL PROCESSES AS REFERRED TO IN ARTICLE 3 (1).

	1	2
	Oenological processes	Conditions and limits of use ^a
1	Aeration or oxygenation	Only when using gaseous oxygen.
2	Heat treatments	[^{X1} Subject to the conditions set out in files 1.8 (1970), 2.2.4 (1988), 3.4.3 (1988) and 3.4.3.1 (1990) of the OIV Code of Oenological Practices.]
3	Centrifugation and filtration with or without an inert filtering agent	Use of an inert filtering agent must not leave undesirable residues in the treated product.
4	Create an inert atmosphere	Only for the purpose to handle the product shielded from the air.
5	Elimination of sulphur dioxide by physical processes	Only with fresh grapes, grape must, partially fermented grape must, partially fermented grape must obtained from raisined grapes, concentrated grape must, rectified concentrated grape must or new wine still in fermentation.
6	Ion exchange resins	Only with grape must intended for the manufacture of rectified concentrated grape must. Subject to the
	ollowing references to a file of the OIV Code of Oenologi Union as authorised oenological practices, subject to the c	
b Regulation (EC) No 1	935/2004 of the European Parliament and of the Council	on materials and articles intended to come

b Regulation (EC) No 1935/2004 of the European Parliament and of the Council 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).

		conditions laid down in Appendix 3.
7	Bubbling	Only when using argon or nitrogen.
8	Flotation	Only when using nitrogen or carbon dioxide or by aerating. Subject to the conditions set out in file 2.1.14 (1999).
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.
10	Electrodialysis treatment	Only for the purpose to ensure the tartaric stabilisation of the wine. Only for partially fermented must for direct human consumption as such and for the products defined in points (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16) of Part II of Annex VII to Regulation (EU) No 1308/2013. Subject to the conditions laid down in Appendix 5 to this Annex.
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.
12	Correction of the alcohol content of wine	Correction only carried out with wine. Subject to the conditions laid down in Appendix 8.
	rences to a file of the OIV Code of Oenolog orised oenological practices, subject to the o	
	he European Parliament and of the Council Directives 80/590/EEC and 89/109/EEC (0	

13	Cation exchangers for tartaric stabilisation	Only for the tartaric stabilisation of partially fermented must for direct human consumption as such and of the products defined in points (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16) of Part II of Annex VII to Regulation (EU) No 1308/2013. 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 ^b 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.
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 Regulation (EU) No 10/2011 and with the national provisions adopted for the implementation thereof. [^{X1} 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

file authorised by the Union as authorised oenological practices, subject to the conditions and limits of use set out in this table.

b Regulation (EC) No 1935/2004 of the European Parliament and of the Council 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).

		treatment shall be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.
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.
16	Membrane coupling	Only for the reduction in sugar content of musts as defined in point 10 of Part II of Annex VII to Regulation (EU) No 1308/2013. Subject to the conditions laid down in Appendix 9.
17	Membrane contactors	Only for the purpose to manage the dissolved gas in wine. Only for the products defined in points (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16) of Part II of Annex VII to Regulation (EU) No 1308/2013. The addition of carbon dioxide for the products defined in points (4), (5), (6) and (8) of Part II of that Annex is prohibited. It must comply with Regulation (EC) No 1935/2004 and
	ences to a file of the OIV Code of Oenologi prised oenological practices, subject to the c	cal Practices indicates the version of the

b Regulation (EC) No 1935/2004 of the European Parliament and of the Council 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).

		with Regulation (EC) 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.
18	Membrane technology coupled with activated carbon	Only for the purpose to reduce excess 4-ethylphenol and 4-ethylguaiacol in wines. Subject to the conditions laid down in Appendix 10.
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.

a 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.

b Regulation (EC) No 1935/2004 of the European Parliament and of the Council 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).

c 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).

Editorial Information

X1 Substituted by Corrigendum to 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 (Official Journal of the European Union L 149 of 7 June 2019).

TABLE 2: AUTHORISED OENOLOGICAL COMPOUNDS AS REFERRED TO IN ARTICLE 3 (1).

	1	2	3	4	5	6	7	8
	Substan	cek/	OIV	OIV	Additive	Processi	n £ onditio	nCategories
	Activitie	s number:	andøde	Codex		aid/	and	of
		orCAS	of	file		substanc	elimits	wine
		number	Oenolog	ic nd ferenc	e	used	of use ^c	products ^d
			Practice	s ^a as referred to in Article 9(1)		as processi aid⁵	ng	
1	Acidity re	gulators						

1.1	Tartaric acid (L(+)-)	E 334/ CAS 87-69-4	File 2.1.3.1.1 (2001); 3.1.1.1 (2001)	COEI-1- LTARAC	X		Condition and limits laid down in Sections C and D of Part I of	(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
1.2	Malic acid (D,L-; L-)	E 296/-	File 2.1.3.1.1 (2001); 3.1.1.1 (2001)	COEI-1- ACIMAL	x		Annex VIII to Regulatio (EU) No 1308/201 and Article 11 of this Regulatio	(7), (8), (9), (10), (11), (12), (15) and
1.3	Lactic acid	E 270/-	File 2.1.3.1.1 (2001); 3.1.1.1 (2001)	COEI-1- ACILAC	x		Specificat for tartaric acid (L(+)-) laid down in point 2 of	(2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
1.4	Potassium L(+)- tartrate	nE 336(ii)/ CAS 921-53-9	File 2.1.3.2.2 (1979); 3.1.2.2 (1979)	COEI-1- POTTAR		x	Appendix 1 to this Annex.	(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
1.5	Potassium bicarbona		File 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	File 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),

1.7	Calcium tartrate	E 354/-	File 3.3.12 (1997)	COEI-1- CALTAR		x		(11), (12), (15) and (16) (1), (2), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
1.8	Calcium sulphate	E 516/-	File 2.1.3.1.1. (2017)	1	x		Condition and limits laid down in point 2(b) of Section A of Annex III. Maximun use level: 2 g/l.	٤(3)
1.9	Potassium carbonate		File 2.1.3.2.5 (2017); 3.1.2.2 (1979)			x		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
2	Preservati	ives and ar	ntioxidants					
2.1	Sulphur dioxide	E 220/ CAS 7446-09-:	File 1.12 (2004); 52.1.2 (1987); 3.4.4 (2003)	COEI-1- SOUDIO	X		Limits (i.e. maximum quantity in the product placed on the market)	(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
2.2	Potassium bisulphite		File 2.1.2 7(1987)	COEI-1- POTBIS	x		as laid down in Section B of Annex I.	(1), (3), (4), (5), (6), (7), (8), (9), (10), (11),

2.3	Potassiun metabisul		File 1.12 (2004), -8.4.4 (2003)	COEI-1- POTANH	x			(12), (15) and (16) (1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
2.4	Potassium sorbate	nE 202	File 3.4.5 (1988)	COEI-1- POTSOR	x			(1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
2.5	Lysozymo	eE 1105	File 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	File 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	grapes, (1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
2.7	Dimethyl (DMDC)	dE24Bónat CAS 4525-33-	3.4.13	COEI-1- DICDIM	X		The treatment shall be recorded in the register referred to in	partially fermented must for direct human consumption as such, (1), (3),

							Article 147(2) of Regulatic (EU) No 1308/201	
3	Sequestra	nts			1	4		
3.1	Charcoal for oenologic use	al	File 2.1.9 (2002); 3.5.9 (1970)	COEI-1- CHARBO)	X		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)
4	Activators	s for alcoh	olic and m	nalolactic fe	ermentatio	n		·
4.1	Microcrys	stāl466@(i)/ CAS 9004-34-	File 2.3.2 6(2005), 3.4.21 (2015)	COEI-1- CELMIC		x	It must comply with the specificat laid down in the Annex to Regulatic (EU) No 231/2012	(7), (10), (11) and (12)
4.2	Diammon hydrogen phosphate	CAS	File 4.1.7 0(1995)	COEI-1- PHODIA		x		io2), (10),
4.3	Ammoniu sulphate	nifa 517/ CAS 7783-20-:	File 4.1.7 2(1995)	COEI-1A	MMSUL	x	No more than 1 g/l (expressed in salts) ^e or 0,3 g/ l for the second fermentati of sparkling wines.	(12), (13), dsecond alcoholic fermentation of (4), (5), (6)
4.4	Ammoniu bisulphite	เห/CAS 10192-30	-0	COEI_1- AMMHY	D	X	alcoholic	

							No more than 0,2 g/l (expressed in salts) and up to the limits set in points 2.1 to 2.3.	(11), (12) and (13) d
4.5	Thiamine hydrochlo		File 2.3.3 (1976); 4.1.7 (1995)	COEI-1- THIAMIN	7	x	Only for alcoholic fermentat	
4.6	Yeast autolysate	-/- :S	File 2.3.2 (2005); 3.4.21 (2015)	COEI-1- AUTLYS		X ^b		Fresh grapes, (2), (10), (11), (12) and (13)
4.7	Yeast cell walls	_/_	File 2.3.4 (1988); 3.4.21 (2015)	COEI-1- YEHULL	,	X ^b		Fresh grapes, (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
4.8	Inactivate yeasts	d/-	File 2.3.2 (2005); 3.4.21 (2015)	COEI-1- INAYEA		X ^b		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 ^b	Only for alcoholic fermentation, (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
5	Clarifying agen	ts		'	
5.1	Edible -/CA gelatine 9000	S File -70-82.1.6 (1997); 3.2.1 (2011)	COEI-1- GELATI	x ^b	(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (11), (12), (15) and (16)
5.2	Wheat protein	File 2.1.17 (2004); 3.2.7 (2004)	COEI-1- PROVEG	X ^b	(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
5.3	Peas protein	File 2.1.17 (2004); 3.2.7 (2004)	COEI-1- PROVEG	X ^b	(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (11), (12), (15) and (16)
5.4	Potatoes protein	File 2.1.17 (2004); 3.2.7 (2004)	COEI-1- PROVEG	x ^b	(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (12), (10), (11), (12), (12), (11), (12), (11), (12), (12), (11), (12), (12), (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 02.1.16 (2004)	COEI-1- CASEIN	X ^b	(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
5.7	Potassiun caseinates	1-/CAS \$68131-54	File - 2 .1.15 (2004); 3.2.1 (2011)	COEI-1- POTCAS	x ^b	(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
5.8	Egg albumin	-/CAS 9006-59-	File 13.2.1 (2011)	COEI-1- OEUALB	X ^b	(1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
5.9	Bentonite	E 558/-	File 2.1.8 (1970); 3.3.5 (1970)	COEI-1- BENTON	X	(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (11), (12), (15) and (16)
5.10	Silicon dioxide (gel or colloidal solution)	E 551/-	File 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), (12), (11), (12), (12), (11), (12), (12), (11), (12),

						(15) an (16)
5.11	Kaolin	-/CAS 1332-58-7	File 73.2.1 (2011)	COEI-1- KAOLIN	x	(1), (3 (4), (5 (6), (7 (8), (9 (15) an (16)
5.12	Tannins		File 2.1.7 (1970); 2.1.17 (2004); 3.2.6 (1970); 3.2.7 (2004); 4.1.8 (1981); 4.3.2 (1981)	COEI-1- TANINS	X	(1), (3 (4), (5 (6), (7 (8), (9 (10), (15) an (16)
5.13	Chitosan derived from <i>Aspergilla</i> <i>niger</i>	-/CAS 9012-76-4 45	[^{x1} File 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) an (16)
5.14	Chitin- glucan derived from <i>Aspergillu</i> <i>niger</i>	Chitin: CAS 1398-61-4 Glucan: 4CAS 9041-22-5	3.2.1 (2011):	COEI-1- CHITGL	X	(1), (3 (4), (5 (6), (7 (8), (9 (10), (11), (12), (15) at (16)
5.15	Yeast protein extracts	-/-	File 2.1.24 (2011); 3.2.14 (2011); 3.2.1 (2011)	COEI-1- EPLEV	X	(1), (3 (4), (5 (6), (7 (8), (9 (10), (11), (12), (15) an (16)

alginateCAS 9005-35-0(1981)4.1.8 ALGIACALGIACin the of all of all and semi- sparkling and semi- sparkling wines obtained by fermentation in bottle and with the lees separated by disgorging.5.18Potassium E 402/ alginateFile A.1.8 9005-36-1(1981)COEI-1- POTALGxOnly of all of al	5.16	Polyvinyl	pēl iy2992 rol CAS 25249-54	3.4.9	COEI-1- PVPP	x	(1), (3), (4), (5), (6), (7), (8), (9), (10), (15) and (16)
alginate CAS 4.1.8 9005-36-1(1981) POTALG in the (6), (7 production(8) an of all (9) categories of sparkling and semi- sparkling wines obtained by fermentation in bottle and with the lees separated by	5.17		CAS	4.1.8		x	in the (6), (7), production(8) and of all (9) categories of sparkling and semi- sparkling wines obtained by fermentation in bottle and with the lees separated by
uisgoiging.	5.18		CAS	4.1.8		x	in the (6), (7), production(8) and of all (9) categories of sparkling and semi- sparkling wines obtained by fermentation in bottle and with the lees separated

6.1	Potassiun hydrogen tartrate	CAS 868-14-4		COEI-1- POTBIT		X	Only to assist the precipitat of tartaric salts.	human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
6.2	Calcium tartrate	E354/-	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	File 3.3.8 (1970); 3.3.1 (1970)	COEI-1- CITACI	x		Maximum content in wine thus treated and placed on the market: 1 g/l	npartially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
6.4	Tannins	-/-	3.3.1 (1970);	COEI-1- TANINS				partially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9),

								(15) and (16)
6.5	Potassiun ferrocyan		File 3.3.1 (1970)	COEI-1- POTFER		X	Subject to the condition laid down in Appendix 4 to this Annex.	partially fermented smust for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
6.6	Calcium phytate	-/CAS 3615-82-	File 53.3.1 (1970)	COEI-1- CALPHY		X	For red wines, no more than 8 g/ hl Subject to the condition laid down in Appendix 4 to this Annex.	(4), (5), (6), (7),
6.7	Metatarta acid	r fc 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-	File 3.3.6 5(1972)	COEI-1- GOMAR	X A		Quantum satis	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	File 2.1.21 (2008); 3.4.15 (2008)	COEI-1- DLTART		x	Only for precipitat excess calcium. Subject to the condition laid down in Appendix 4 to this Annex.	(1), (3), (4), (5),
6.10	Yeast mannopro	-/- oteins	File 3.3.13 (2005)	COEI-1- MANPRO				partially fermented must for direct human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16)
6.11	Carboxyn	n EthG6 cellu	l bške 3.3.14 (2008)	COEI-1- CMC	x		Only to ensure tartaric stabilisati	Vins blancs, (4), (5), o(f6), (7), (8), (9)
6.12		in/ƙda&ole- p&78615d40 rs		COEI-1- PVIPVP		x	The treatment shall be recorded in the register referred to in Article 147(2) of Regulatio (EU) No 1308/201	(6), (7), (8), (9), (10), (11), (12), (15) and (16) n

6.13	Potassiun polyaspa		File 3.3.15 -&2016)	COEI-1- POTASP	X		Only to contribute to the tartaric stabilisati	(6), (7), (8), (9),
7	Enzymes	5 ^f	1		<u>I</u>			<u>I</u>
7.1	Urease	EC 3.5.1.5	File 3.4.11 (1995)	COEI-1- UREASE		X	Only to reduce the level of urea in the wine. Subject to the condition laid down in Appendix 6 to this Annex.	(6), (7), (8), (9),
7.2	Pectin lyases	EC 4.2.2.10	File 2.1.4 (2013); 2.1.18 (2013); 3.2.8 (2013); 3.2.11 (2013)	COEI-1- ACTPLY		X	Only for oenologic purposes in maceratic clarificati stabilisati filtration and to reveal the aromatic precursor of grapes.	(5), (6), (7), (8), n(9), (10), o(rl, 1), o(rl, 2), (15) and (16)
7.3	Pectin methyles	EC steðasel.11	File 2.1.4 (2013); 2.1.18 (2013); 3.2.8 (2013); 3.2.11 (2013)	COEI-1- ACTPME		x	Only for oenologic purposes in maceratic clarificati stabilisati filtration and to reveal the aromatic precursor	a(B), (4), (5), (6), (7), (8), (19), (10), o(t ,1), o(t ,2), (15) and (16)

					of grapes.
7.4	PolygalactEitGnase 3.2.1.1		COEI-1- ACTPGA	X	Only for (1), (3), oenologica(4), (5), purposes (6), (7), in (8), (9), maceration(10), clarification(1,1), stabilisation(1,2), filtration (15) and and to (16) reveal the aromatic precursors of grapes.
7.5	Hemicellu ECe 3.2.1.7	File 2.1.4 (2013); 2.1.18 (2013); 3.2.8 (2013); 3.2.11 (2013)	COEI-1- ACTGHE	x	Only for (1), (3), oenologica(4), (5), purposes (6), (7), in (8), (9), maceration(10), clarificatio(1,1), stabilisatio(1,2), filtration (15) and and to (16) reveal the aromatic precursors of grapes.
7.6	Cellulase EC 3.2.1.4	File 2.1.4 (2013); 2.1.18 (2013); 3.2.8 (2013); 3.2.11 (2013)	COEI-1- ACTCEL	x	Only for (1), (3), oenologica(4), (5), purposes (6), (7), in (8), (9), maceration(10), clarificatio(1,1), stabilisatio(1,2), filtration (15) and and to (16) reveal the aromatic precursors of grapes.
7.7	BetaglucarFaSe 3.2.1.58	File 3.2.10 (2004)	COEI-1- BGLUCA	X	Only for oenologica(4), (3), purposes (6), (7), in (8), (9),

							maceration clarificati stabilisati filtration and to reveal the aromatic precursor of grapes.	o(rl,1), o(rl,2), (15) and (16)
7.8	Glycosida	asteC 3.2.1.20	File 2.1.19 (2013); 3.2.9 (2013)	COEI-1- GLYCOS		X	Only for oenologic purposes in maceratic clarificati stabilisati filtration and to reveal the aromatic precursor of grapes.	a(4), (5), (6), (7), (8), (9), r(10), o(r(1,1), o(r(1,2), (15) and (16)
8	Gases and	d packagin	g gases ^g				I	<u>, </u>
8.1	Argon	E 938/ CAS 7440-37-	File 2.2.5 1(1970); 3.2.3 (2002)	COEI-1- ARGON	x ^g	x		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
8.2	Nitrogen	CAS	File 2.1.14 (1999);2.2 (1970); 3.2.3 (2002)	COEI-1- AZOTE 2.5	x ^g	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	File 1.7 (1970); 2.1.14 (1999); 2.2.3	COEI-1- DIOCAR	X ^g	x	In the case of still wines the	partially fermented must for direct human

			(1970); 2.2.5 (1970); 2.3.9 (2005); 4.1.10 (2002)				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 temperatu of 20 °C.	re
8.4	Gaseous oxygen	E 948/ CAS 17778-80	File 2.1.1 -22016); 3.5.5 (2016)	COEI-1- OXYGEN	1	x		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
9	Fermenta	tion agents		1		<u>I</u>		
9.1	Yeasts for wine productio	-/- n	File 2.3.1 (2016); 4.1.8 (1981)	COEI-1- LESEAC		x ^b		Fresh grapes, (2), (10), (11), (12), (13), second alcoholic fermentation of (4), (5), (6) and (7)

9.2	Lactic acid bacteria	-/-	File 3.1.2 (1979); 3.1.2.3 (1980)	COEI-1- BALACT	X ^b		(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (15) and (16)
10	Correctio	n of defect	S	1			<u> </u>
10.1	Copper sulphate, pentahydr	-/CAS 7758-99-3 rate	File 83.5.8 (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 unfermen or slightly fermented grape must, for which the copper content may not exceed 2 mg/l.	human consumption as such, (1), (3), (4), (5), (6), (7), (8), (9), (15) and (16) ted
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	partially fermented must for direct human consumption as such,

						of the product so treated does not exceed 1 mg/l, with the exception of liqueur wines prepared from fresh unfermen or slightly fermented grape must, for which the copper content may not exceed 2 mg/l.	ted
10.3	Chitosan derived from <i>Aspergillu</i> <i>niger</i>	-/CAS 9012-76-4 15	File 13.4.16 (2009)	COEI-1- CHITOS	X		(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
10.4	Chitin- glucan derived from <i>Aspergillu</i> <i>niger</i>	Chitin: CAS 1398-61-4 Glucan: 4CAS 9041-22-9		COEI-1- CHITGL	X		(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)
10.5	Inactivate yeasts	d/-		COEI-1- INAYEA	x ^b		(1), (3), (4), (5), (6), (7), (8), (9),

11 11.1	Other pra Aleppo pine resin	ctices			x		Subject to the condition laid down in Appendix 2 to this Annex.	
11.2	Fresh lees	-/-				x ^b	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.	on S
11.3	Caramel	E 150 a- d/-	File 4.3 (2007)	COEI-1- CARAMI			To reinforce the colour as defined in point 2 of Annex I to Regulatio	(3) n

				(EC) No 1333/2008.
11.4	Allyl -/57-06-7 isothiocyanate		X	Only to impregnate partially discsOnly for impregnate partially discsof pure
11.5	Inactivated/- yeasts	COEI-1- INAYEA	x ^b	(1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (15) and (16)

a 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.

b 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).

- c 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.
- d If not applicable to all categories of wine products laid down in Part II of Annex VII to Regulation (EU) No 1308/2013.
- e 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.
- **f** See also Article 9(2) of this Regulation.

g 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).

Appendix 1 Tartaric acid (L(+)-) and derived products

 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 the following wine-growing regions in the northern part of wine-growing zone A:

- Ahr,
- Rheingau,
- Mittelrhein,
- Mosel,
- Nahe,
- Rheinhessen,
- Pfalz,
- Moselle luxembourgeoise.
- 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).

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 winemaking 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 21.
- 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.
- 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 (m0). Place the dishes in an oven (point 5.4) and dry to constant weight (m1).
- 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 (m2).
- 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 m3 and m4 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 (m1 - m2)

where m1 and m2 are expressed in grams.

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

500 (m1 - m2 - m3 + m4)

where m1, m2, m3 and m4 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.

Appendix 4

Potassium alcium phytateDL tartaric acid ferrocyanide

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 electrodialysis 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

Changes to legislation: There are outstanding changes not yet made to Commission Delegated Regulation

(EU) 2019/934. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

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 electrodialysis 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 electrodialysis 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 electrodialysis 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.

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 simulant of all the determined compounds must be less than 50 μ g/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.

The treatment is to be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.

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 μ mol 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 $< 1 \mu m$).
- 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
Salmonella 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. 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.

This treatment is to be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.

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.

(EU) 2019/934. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

- (5) The treatment is to be carried out under the responsibility of an oenologist or qualified technician.
- (6) The treatment must be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.
- (7) The Member States may require this treatment to be notified in advance to the competent authorities.

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.

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) The treatment must be recorded in the register referred to in Article 147(2) of Regulation (EU) No 1308/2013.
- (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 tardia',
 - 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',
- wines from Slovenia entitled to a protected designation of origin and described by the term 'vrhunsko vino ZGP — pozna trgatev',
- 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,
 - 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),

Changes to legislation: There are outstanding changes not yet made to Commission Delegated Regulation (EU) 2019/934. Any changes that have already been made to the legislation appear in the content

and are referenced with annotations. (See end of Document for details) View outstanding changes

- 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),
 - 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,
 - 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 Πάρος (Malvasia Paros),
 - Malvasia Σητείας (Malvasia Sitia),
 - Malvasia Χάνδακας Candia,
 - Movεμβασία- 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),

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 Aigaio Pelagos),
- Δράμα (Drama),

Changes to legislation: There are outstanding changes not yet made to Commission Delegated Regulation (EU) 2019/934. Any changes that have already been made to the legislation appear in the content

and are referenced with annotations. (See end of Document for details) View outstanding changes

- Ηράκλειο (Iraklio),
- Καστοριά (Kastoria),
- Κρήτη (Crete),
- Μακεδονία (Macedonia),
- Ρέθυμνο (Rethimno),
- Σιάτιστα (Siatista),
- Στερεά Ελλάδα (Sterea Ellada),
- Xανιά (Chania),
- wines from the Czech Republic entitled to the descriptions 'výběr z bobulí',
 'výběr z cibéb', 'ledové víno' or 'slámové víno',
 - wines from Slovakia entitled to a protected designation of origin and described by the terms 'bobul'ový výber', 'hrozienkový výber', 'cibébový výber', 'l'adové 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 máslás', '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',
- 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' or 'vrhunsko vino ZGP suhi jagodni izbor',
- 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.
- 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.

- 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.

Changes to legislation:

There are outstanding changes not yet made to Commission Delegated Regulation (EU) 2019/934. Any changes that have already been made to the legislation appear in the content and are referenced with annotations.

View outstanding changes

Changes and effects yet to be applied to :

- Annex 1 Pt. C point 3 words omitted by S.I. 2021/632 reg. 10(7)(b)(ii)
- Annex 1 Pt. C point 2(a) words substituted by S.I. 2021/632 reg. 10(7)(a)(i)
- Annex 1 Pt. C point 2(b) words substituted by S.I. 2021/632 reg. 10(7)(a)(ii)
- Annex 1 Pt. C point 3 words substituted by S.I. 2021/632 reg. 10(7)(b)(i)
- Annex 1 Pt. D point 2 words substituted by S.I. 2021/632 reg. 10(8)(a)
- Annex 1 Pt. D point 3 words substituted by S.I. 2021/632 reg. 10(8)(b)
- Annex 1 Pt. A words omitted by S.I. 2021/632 reg. 10(5)(a)
- Annex 1 Pt. A words omitted by S.I. 2021/632 reg. 10(5)(b)(i)
- Annex 1 Pt. A words omitted by S.I. 2021/632 reg. 10(5)(b)(iii)
- Annex 1 Pt. A footnote words omitted by S.I. 2021/632 reg. 10(5)(b)(iv)
- Annex 1 Pt. A words substituted by S.I. 2021/632 reg. 10(5)(b)(ii)

Changes and effects yet to be applied to the whole legislation item and associated provisions

- Signature words omitted by S.I. 2020/1637 reg. 29(11)
- Annex 1 Pt. A Appendix 1 point 1 omitted by S.I. 2021/632 reg. 10(5)(c)
- Annex 1 Pt. A Appendix 2 omitted by S.I. 2021/632 reg. 10(5)(d)
- Annex 1 Pt. A Appendix 3 words omitted by S.I. 2021/632 reg. 10(5)(e)(i)
- Annex 1 Pt. A Appendix 4 words omitted by S.I. 2021/632 reg. 10(5)(f)(ii)
- Annex 1 Pt. A Appendix 3 words substituted by S.I. 2021/632 reg. 10(5)(e)(ii)
- Annex 1 Pt. A Appendix 4 words substituted by S.I. 2021/632 reg. 10(5)(f)(i)(aa)
- Annex 1 Pt. A Appendix 4 words substituted by S.I. 2021/632 reg. 10(5)(f)(i)(bb)
- Annex 1 Pt. A Appendix 8 point 7 words substituted by S.I. 2021/632 reg. 10(5)(g)
- Annex 1 Pt. B Appendix 8s. A point 3 omitted by S.I. 2021/632 reg. 10(6)(a)(ii)
- Annex 1 Pt. B Appendix 8s. A point 2(c) substituted for Pt. B s. A(2)(c)-(e) by S.I.
 2021/632 reg. 10(6)(a)(i)
- Annex 1 Pt. B Appendix 8s. A point 5 word substituted by S.I. 2021/632 reg. 10(6)
 (a)(iv)(bb)
- Annex 1 Pt. B Appendix 8s. A point 4 words substituted by S.I. 2021/632 reg. 10(6)
 (a)(iii)(aa)
- Annex 1 Pt. B Appendix 8s. A point 4 words substituted by S.I. 2021/632 reg. 10(6) (a)(iii)(bb)
- Annex 1 Pt. B Appendix 8s. A point 4 words substituted by S.I. 2021/632 reg. 10(6) (a)(iii)(cc)
- Annex 1 Pt. B Appendix 8s. A point 5 words substituted by S.I. 2021/632 reg. 10(6) (a)(iv)(aa)
- Annex 1 Pt. B Appendix 8s. C point 2 words substituted by S.I. 2021/632 reg. 10(6)
 (b)(i)
- Annex 1 Pt. B Appendix 8s. C point 2 words substituted by S.I. 2021/632 reg. 10(6) (b)(ii)
- Annex 3 s. A point 2(b) omitted by S.I. 2021/632 reg. 10(14)(b)
- Annex 3 s. A point 4(c) omitted by S.I. 2021/632 reg. 10(14)(d)(ii)
- Annex 3 s.B omitted by S.I. 2021/632 reg. 10(15)
- Annex 3 Appendix 1-3 omitted by S.I. 2021/632 reg. 10(15)
- Annex 3 s. A point 2(a) word omitted by S.I. 2021/632 reg. 10(14)(a)
- Annex 3 s. A point 4(a) words omitted by S.I. 2021/632 reg. 10(14)(d)(i)
- Annex 3 s. A point 3 words substituted by S.I. 2021/632 reg. 10(14)(c)
- Annex 2 s. C point 2 omitted by S.I. 2021/632 reg. 10(12)(b)

_	Annex 2 s. A point 4(d) substituted by S.I. 2021/632 reg. 10(10)(b) Annex 2 s. A point 4 word inserted by S.I. 2021/632 reg. 10(10)(a)(ii)
_	Annex 2 s. B point 2 word substituted by S.I. $2021/632$ reg. $10(11)(a)(ii)$
_	Annex 2 s. B point 4(a) words omitted by S.I. 2021/632 reg. 10(11)(b)
_	Annex 2 s. C point 1 words omitted by S.I. 2021/632 reg. 10(12)(a)(i)
_	Annex 2 s. C point 1 words omitted by S.I. 2021/632 reg. 10(12)(a)(ii)
_	Annex 2 s. C point 9(a) words omitted by S.I. 2021/632 reg. 10(12)(c)
_	Annex 2 s. A point 4 words substituted by S.I. 2021/632 reg. 10(10)(a)(i)
_	Annex 2 s. B point 2 words substituted by S.I. 2021/632 reg. 10(11)(a)(i)
_	Art. 1a inserted by S.I. 2020/1637 reg. 29(3)
_	Art. 4(1)(a) words inserted by S.S.I. 2022/361 reg. 11(2)(b)
_	Art. 4(1)(a) words omitted by S.S.I. 2022/361 reg. 11(2)(a)
_	Art. 4(1)(a) words omitted by S.I. 2022/1150 reg. 10(2)
_	Art. 4(1)(a) words omitted by S.I. 2022/1215 reg. 7(2)
_	Art. 4(1)(c) words substituted by S.I. 2020/1637 reg. 29(5)(a)(ii)(aa)
_	Art. 4(1)(c) words substituted by S.I. 2020/1637 reg. 29(5)(a)(ii)(bb)
_	Art. 14(6) inserted by S.I. 2020/1637 reg. 29(10)(f)