



Vine and Wine
Departement

TITRIVIN BTB

REFERENCE MATERIAL FOR OENOLOGY LABORATORY

CERTIFICATE OF ANALYSIS

Material

Blend of wines and musts from different sources.

Preparation

In accordance with the techniques and processes used in oenology.

Packaging

Glass Bottle - nominal capacity 240 ml.

Homogeneity

Control test performed on 4 ⁰/₀₀ of bottles sampled at regular intervals during packaging.

Stability

Checked by the statistical exploitation of results obtained by 7 laboratories.

Storage

Away from light between 5 °C and 25°C.

Reference values

Values were determined from the results of a series of tests involving about 40 oenology laboratories, accredited by COFRAC (French Accreditation Committee).

Values were calculated in accordance with the provisions of NF ISO 5725 standard.

Confidence interval

Corresponds to the uncertainty on the reference value with $k = 2$.

Acceptance interval

For one analysis, it corresponds to the maximum variation founded by the laboratory around the reference value.

Use

Material for control testing of methods and equipment used to analyse wines.

Use within 12 hours after opening.

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Batch T 04091213 B

Parameter	REFERENCE VALUE	CONFIDENCE INTERVAL (k=2)		ACCEPTANCE INTERVAL (k=2)	
		Inferior limit	Superior limit	Inferior limit	Superior limit
Alcoholic strength by vol. ⁽¹⁾ (%)	12,93	12,89	12,97	12,77	13,09
Reducing sugars ⁽¹⁾ (g/L)	2,72	2,56	2,88	2,48	2,96
Glucose + fructose ⁽²⁾ (g/L)	1,66	1,58	1,74	1,50	1,82
pH ⁽¹⁾	3,26	3,24	3,28	3,22	3,30
Total acidity ⁽¹⁾ :					
⇒ g d'H ₂ SO ₄ /L	3,36	3,31	3,41	3,14	3,58
⇒ meq/L	68,6	67,5	69,6	64,1	73,1
Volatile acidity ⁽¹⁾ :					
⇒ g d'H ₂ SO ₄ /L	0,42	0,40	0,44	0,36	0,48
⇒ meq/L	8,6	8,2	9,0	7,3	9,8
Acetic acid ⁽²⁾ (g/L)	0,49	0,46	0,52	0,43	0,55
L-malic acid ⁽²⁾ (g/L)	0,82	0,77	0,87	0,66	0,98
Density ⁽¹⁾ (g/l)	989,23	989,13	989,33	988,81	989,65
L-lactic acid ⁽²⁾ (g/L)	0,91	0,86	0,96	0,81	1,01
Sorbate ⁽¹⁾ (mg/l)	92,2	87,6	96,8	80,2	104,2
Tartaric acid ⁽²⁾ (g/l)	1,38	1,27	1,49	1,16	1,60
Iron ⁽¹⁾ (mg/l)	4,71	4,52	4,90	4,15	5,27
Copper ⁽¹⁾ (mg/l)	0,56	0,52	0,60	0,44	0,68
Potassium ⁽²⁾ (mg/l)	631,0	612,1	649,9	565,0	697,0
Calcium ⁽²⁾ (mg/l)	72,0	69,1	74,9	68,0	76,0

(1) value obtained by official methods OIV
(2) value obtained by usual methods OIV

Validity :

- DEC 2013



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Person in charge