



Vine and Wine  
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# TITRIVIN AA 2

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

By Pharmaceutical Products Factory.  
Glass ampoules - nominal capacity 10 ml.

### Homogeneity

Control test performed on 1<sup>0</sup>/<sub>00</sub> of ampoules 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

Each value is expressed with a confidence interval of the mean above or equal to 95%.

### Acceptance interval

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

### Use

- ✓ Calibration of measuring instruments
- ✓ Quality control
- ✓ Estimate of uncertainties

*Expendable ampoules to be used immediately after opening.*

## Batch A 04091213 2

Parameter	REFERENCE VALUE	CONFIDENCE INTERVAL (κ=2)		ACCEPTANCE INTERVAL (κ=2)	
		Inferior limit	Superior limit	Inferior limit	Superior limit
Alcoholic strength by vol. <sup>(1)</sup> (%)	10,87	10,83	10,91	10,75	10,99
Reducing sugars <sup>(1)</sup> (g/L)	5,39	5,17	5,61	4,79	5,99
Glucose + fructose <sup>(2)</sup> (g/L)	4,27	4,06	4,48	3,95	4,59
pH <sup>(1)</sup>	3,04	3,02	3,06	2,98	3,10
Total acidity <sup>(1)</sup> :					
⇒ g d'H <sub>2</sub> SO <sub>4</sub> /L	3,69	3,63	3,75	3,47	3,91
⇒ meq/L	75,3	74,2	76,4	70,8	79,8
Volatile Acidity <sup>(1)</sup> :					
⇒ g d'H <sub>2</sub> SO <sub>4</sub> /L	0,31	0,29	0,33	0,27	0,35
⇒ meq/L	6,3	5,9	6,7	5,5	7,1
Acetic acid <sup>(2)</sup> (g/L)	0,36	0,33	0,39	0,30	0,42
L-malic acid <sup>(2)</sup> (g/L)	0,85	0,80	0,90	0,71	0,99
L-lactic acid <sup>(2)</sup> (g/L)	0,90	0,85	0,95	0,78	1,02
D.O 280 <sup>(1)</sup>	17,75	17,48	18,02	16,63	18,87

(1) value obtained by official methods OIV

(2) value obtained by usual methods OIV

Validity :

- DEC 2013

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