



Vine and Wine  
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# TITRIVIN AA 3

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 3**

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> (%)	12,33	12,29	12,37	12,17	12,49
Reducing sugars <sup>(1)</sup> (g/L)	7,54	7,24	7,84	7,16	7,92
Glucose + fructose <sup>(2)</sup> (g/L)	6,34	6,02	6,66	6,00	6,68
pH <sup>(1)</sup>	2,86	2,84	2,88	2,80	2,92
Total acidity <sup>(1)</sup> :					
⇒ g d'H <sub>2</sub> SO <sub>4</sub> /L	5,09	5,01	5,17	4,81	5,37
⇒ meq/L	103,9	102,3	105,4	98,2	109,6
Volatile Acidity <sup>(1)</sup> :					
⇒ g d'H <sub>2</sub> SO <sub>4</sub> /L	0,45	0,43	0,47	0,41	0,49
⇒ meq/L	9,2	8,8	9,6	8,4	10,0
Acetic acid <sup>(2)</sup> (g/L)	0,53	0,50	0,56	0,45	0,61
L-malic acid <sup>(2)</sup> (g/L)	1,99	1,87	2,11	1,61	2,37
L-lactic acid <sup>(2)</sup> (g/L)	0,70	0,66	0,74	0,60	0,80
D.O 280 <sup>(1)</sup>	23,48	23,13	23,83	22,02	24,94

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

Validity :

- DEC 2013

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