

## RESOLUTION OENO 54/2000

### III. WINE VINEGARS - DETERMINATION OF THE VOLATILE ACID CONTENT (OIV-MA-VI-03)

#### 1. DEFINITION

By convention, the volatile acidity of vinegar refers to the difference between the total acidity and the fixed acidity.

#### 2. PRINCIPLE

Calculation of difference between total acidity and fixed acidity, expressed in grams of acetic acid per L.

#### 3. REFERENCES

See the methods I (determination of total acidity content) and II (determination of the fixed acidity content).

#### 4. RESULTS

##### 4.1. Calculation

Considering:

$A_t$  to be the total acidity content (expressed in grams of acetic acid per L of sample) and

$A_f$  to be the fixed acidity content (expressed in grams of acetic acid per L of sample).

The volatile acidity content expressed in grams of acetic acid per L of sample is given by:

- $A_t - A_f$

##### 4.2. Presentation

The results expressed in grams of acetic acid per liter are given to the first decimal.

## 5. INTERLABORATORY VALIDATION (Hitos et al. 2000)

Units: % (m/V)

Sample	r	S <sub>r</sub>	RSD <sub>r</sub>	R	S <sub>R</sub>	RSD <sub>R</sub>	RSD <sub>R</sub> (Horwitz)	Horrat Index
1 – 8.24% (m/v)	0.0445	0.016	0.19	0.1632	0.058	0.71	2.91	0.24
2 – 11.17% (m/v)	0.0438	0.016	0.14	0.1967	0.070	0.63	2.78	0.23
3 – 11.20% (m/v)	0.0595	0.021	0.19	0.2076	0.074	0.66	2.78	0.24
4 – 11.94% (m/v)	0.0473	0.017	0.14	0.1652	0.059	0.49	2.75	0.18
5 – 11.16% (m/v)	0.0518	0.019	0.17	0.3577	0.0128	1.14	2.78	0.41

## 6. BIBLIOGRAPHY

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3. Hitos P., Pons A., Martin de la Hinojosa, I, Gomez R., Hernandez A. and Muñoz J., 2000. Validation of analysis methods for total, fixed and volatile acidity of non-volatile reducing substances, copper and zinc in wine vinegars, Green Sheet of OIV No. 115.