

ATAGO® WINE REFRACTOMETER

Wine

- ▷ Grape growers
- ▷ Wine cooperatives (sorting grape must)
- ▷ Wineries (purchasing grape must)
- ▷ Buyers for grape must



Refractometers can effectively estimate the alcohol content in finished wine.

Refractometers are used to measure the sugar content of grape must before fermentation. During fermentation, sugars in grape must are converted into alcohol. Pre-fermentation Brix readings are a reliable indicator for the finished alcohol level. Although Brix is a popular sugar scales for winemakers worldwide, there are other scales for measuring grape must. The WM-7™ Digital Wine Refractometer is equipped with 7 scales to satisfy the need of end-users in different countries and regions to meet various standards.

Digital Wine Refractometer

WM-7™

Cat.No.3415



7
Scales

Scales	Measurement range	Resolution	Measurement accuracy
[1] Brix (determined by ICUMSA)	0.0 to 45.0%	0.1%	±0.1%
[2] T.A. 1990 (Titre Alcometrique established in 1990)	0.0 to 26.0%	0.1%	±0.2%
[3] T.A.1971 (Titre Alcometrique established in 1971)	0.0 to 25.0%	0.1%	±0.2%
[4] Oe (GER) (Oechsle used in Germany)	0 to 240°	1°	± 1°
[5] Oe (Oechsle)	0 to 240°	1°	± 1°
[6] KMW (or Babo)	0.0 to 40.0°	0.1°	±0.2°
[7] Baume	0.0 to 21.0°	0.1°	±0.2°
Measurement temperature	5 to 40°C (ATC)		
Ambient temperature	5 to 40°C		
Measurement time	3 seconds		
Power supply	006P alkaline battery (9V)		
International protection class	IP65 Water resistant		
Dimensions and weight	17×9×4cm, 270g (main unit only)		

Calibration solutions on Page 99

Digital Hand-held "Pocket" Wine Refractometer



PAL™-84S

- PAL™ -79S Cat.No.4479
- PAL™ -80S Cat.No.4480
- PAL™ -83S Cat.No.4483
- PAL™ -84S Cat.No.4484
- PAL™ -86S Cat.No.4486
- PAL™ -87S Cat.No.4487

Dual
Scale

Brix Scale Model PAL™ -1 P73

Model	Cat.No.	Scale	Measurement range	Resolution	Measurement accuracy
PAL™-79S	4479	T.A. 1990	0.0 to 26.0%	0.1%	±0.2%
PAL™-80S	4480	T.A. 1971	0.0 to 25.0%	0.1%	±0.2%
PAL™-83S	4483	KMW (or Babo)	0.0 to 40.0°	0.1°	±0.2°
PAL™-84S	4484	Baume	0.0 to 21.0°	0.1°	±0.2°
PAL™-86S	4486	Oe (GER)	0 to 240°	1°	± 1°
(Dual Scale)		Brix	0.0 to 53.0%	0.1%	±0.2%
PAL™-87S	4487	Oe (Oechsle)	0 to 240°	1°	±1°
(Dual Scale)		Brix	0.0 to 53.0%	0.1%	±0.2%

Measurement temperature	10 to 40°C (ATC)
Measurement time	3 seconds
Power supply	2×AAA Batteries
International protection class	IP65 Water resistant
Dimensions and weight	5.5×3.1×10.9cm, 100g (main unit only)

ATC & Water Resistant Wine Refractometer

MASTER™ -TA	Cat.No.2590
MASTER™ -OE	Cat.No.2591
MASTER™ -GOE	Cat.No.2592
MASTER™ -KMW	Cat.No.2593
MASTER™ -BAUME	Cat.No.2594



Material: Metal

Brix Scale Model



Model	MASTER™ -TA	MASTER™ -P/TA
Cat.No.	2590	2600
Scale range	T.A. 0.0 to 25.0% Brix 0.0 to 40.0% (ATC)	T.A. 0.0 to 25.0% Brix 0.0 to 40.0%
Minimum scale	T.A. 0.2% Brix 0.5%	T.A. 0.2% Brix 0.5%
Accuracy	T.A. $\pm 0.3\%$ Brix $\pm 0.5\%$ (10 to 30°C)	T.A. $\pm 0.3\%$ Brix $\pm 0.5\%$
Size and weight	3.2x3.4x16.8cm, 130g	3.2x3.4x16.8cm, 90g
Model	MASTER™ -OE	MASTER™ -P/OE
Cat.No.	2591	2601
Scale range	Oe 0 to 130° Brix 0.0 to 33.0% (ATC)	Oe 0 to 130° Brix 0.0 to 33.0%
Minimum scale	Oechsle 2° Brix 0.5%	Oechsle 2° Brix 0.5%
Accuracy	Oechsle $\pm 2^\circ$ Brix $\pm 0.5\%$ (10 to 30°C)	Oechsle $\pm 2^\circ$ Brix $\pm 0.5\%$
Size and weight	3.2x3.4x16.8cm, 130g	3.2x3.4x16.8cm, 90g
Model	MASTER™ -GOE	MASTER™ -P/GOE
Cat.No.	2592	2602
Scale range	German Oechsle 30 to 170° Brix 0.0 to 40.0% (ATC)	German Oechsle 30 to 170° Brix 0.0 to 40.0%
Minimum scale	German Oechsle 1° Brix 0.5%	German Oechsle 1° Brix 0.5%
Accuracy	German Oechsle $\pm 2^\circ$ Brix $\pm 0.5\%$ (10 to 30°C)	German Oechsle $\pm 2^\circ$ Brix $\pm 0.5\%$
Size and weight	3.2x3.4x16.8cm, 130g	3.2x3.4x16.8cm, 90g
Model	MASTER™ -KMW	MASTER™ -P/KMW
Cat.No.	2593	2603
Scale range	KMW 0.0 to 27.0° Brix 0.0 to 33.0% (ATC)	KMW 0.0 to 27.0° Brix 0.0 to 33.0%
Minimum scale	KMW 0.5° Brix 0.5%	KMW 0.5° Brix 0.5%
Accuracy	KMW $\pm 0.5^\circ$ Brix $\pm 0.5\%$ (10 to 30°C)	KMW $\pm 0.5^\circ$ Brix $\pm 0.5\%$
Size and weight	3.2x3.4x16.8cm, 130g	3.2x3.4x16.8cm, 90g
Model	MASTER™ -BAUME	MASTER™ -P/BAUME
Cat.No.	2594	2604
Scale range	Baume 0.0 to 21.0° Brix 0.0 to 40.0% (ATC)	Baume 0.0 to 21.0° Brix 0.0 to 40.0%
Minimum scale	Baume 0.2° Brix 0.5%	Baume 0.2° Brix 0.5%
Accuracy	Baume $\pm 0.3^\circ$ Brix $\pm 0.5\%$ (10 to 30°C)	Baume $\pm 0.3^\circ$ Brix $\pm 0.5\%$
Size and weight	3.2x3.4x16.8cm, 130g	3.2x3.4x16.8cm, 90g

Wine Refractometer

MASTER™ -P/TA	Cat.No.2600
MASTER™ -P/OE	Cat.No.2601
MASTER™ -P/GOE	Cat.No.2602
MASTER™ -P/KMW	Cat.No.2603
MASTER™ -P/BAUME	Cat.No.2604



Material: Plastic

Brix Scale Model

Scales	Model
T.A. 1990 / Brix	MASTER™-TA MASTER™-P/TA
Oe (Oechsle) / Brix	MASTER™-OE MASTER™-P/OE
Oe (GER) / Brix	MASTER™-GOE MASTER™-P/GOE
KMW (or Babo) / Brix	MASTER™-KMW MASTER™-P/KMW
Baume / Brix	MASTER™-BAUME MASTER™-P/BAUME