DS Oenophoto

Enzymatic and colorimetric analysis by photometry

This photometer makes possible fast and reliable analysis by the winemaker himself, for common parameters such as residual sugars, yeast assimilable nitrogen, malic acid, etc. Completed with common accessories at the laboratory and colorimetric & enzymatic kits, it allows the wineries to run their own analysis.

Principle

A photometer or spectrophotomer is an instrument that permits the measurement of how much a solution absorbs over a certain range of wavelength. A part of the light that passes through the sample solution is absorbed by the chemical molecules of the sample, and is this amount of light absorbed that the instrument measures.

For the analyses in oenology, we compare the reaction produced by an enzymatic or colorimetric reagent in a white (water), a standard solution, and a sample in order to determine the concentration of the required parameter in the sample. Indeed, this reaction causes a change of absorbance, proportional to the concentration of the parameter (Beer-Lambert law). The absorbance of the sample is measured by photometry over a certain range of wavelength.

Advantages

- Adapted to cuvettes with O.P. 10 mm semi-micro
- Connected via Bluetooth with the Android operating system (smartphone or tablet, not supplied)
- DS Oenophoto Application available for free download from Apple App Store Play Store
- Export of data in CSV format (for Excel spreadsheet for example)
- Analyze up to 12 samples simultaneously



Ref.197400







DS Oenophoto software



Technical features

Wavelentgh	340 and 580 nm
Photometric range	-0.2 to 3.0 A
Linearity	1% between 0.2 et 2.5A
Ambient environment for use	5 to 40°C- maximum relative humidity 80% Ventilated room, without dust, away from direct sunlight, without vibrations
Port	Bluetooth
Dimensions / Weight	115 x 65 x 55 mm / 240g
Power supply	Battery operation, rechargeable through USB cable

Parameters & available references

Reference for reagent kit	Parameters
197820	Acetic acid
197821	L-malic acid
197822	L-lactic acid
197823	D-lactic acid
197824	D-gluconic acid
197825	D-malic acid
197826	D-Glucose/D-Fructose
197847	D-glucose
197827/M	Total sugars (Sucrose + G/F)
197829/M	Alpha amino nitrogen
197832/M	Iron
197833/M	Copper
197841/M	Citric acid
197843	Acetaldehyde
197845/M	Ammoniacal nitrogen
197846	Glycerol

Supply with:

- 605301 : Clinipet+ micropipette with fixed volume 10 μl
- 605310: Clinipet+ micropipette with fixed volume $100~\mu l$
- 605375 : Clinipet+ micropipette with fixed volume 750 μl
- 605075 : 200 μl yellow tips for ref. 605053 (x 1000)
- 605076 : 1000 μl blue tips for ref. 605050 (x 1000)
- 197818 : Semi-micro cell PMMA (x100)
- 605300 : Holder for 4 Clinipet+ micropipettes

Options

Mini vortex mixer



Easy and quick agitation of the samples after adding the reagents. It activates automatically and rises quickly at high speed.

Mini centrifuge

Powerful and Convenient Mini Centrifuge for simple and quick Applications.



 Complete kit for quick vacuum degasification (ref: 617550)



Vacuum filtration. Kit for a quick degasification of samples before analysis.

Dry Block Heaters

Heating thermostat for spectrophotometry cells.



