

CDRWineLab®

Analysis system
for wine quality
control



CDR WineLab® system

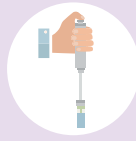
CDR WineLab® consists of a thermostatically controlled analyser with photometric technology using LED emitters and kits of reagents that are pre-filled into vials and ready to use.



1

Take the sample

to be analysed using the pipettes supplied with the system.



2

Place the sample

in the test tube containing the pre-filled reagent.



3

Insert the test tube

into the reading cell to obtain the analysis result.



Reduced analysis times

With **CDR WineLab®** you are finally free to carry out the analyses independently, in your own wine cellar, quickly and easily, without having to rely on an external laboratory. In fact, it is possible to analyse **16 samples simultaneously** and constantly monitor the production process, obtaining specific and precise answers in a few minutes.



Easy to use

The system has been designed so that it can be used **not only in the laboratory, but also on the production line for real-time results**, by personnel without specific technical training.

The analysis methods, shown on the display, are simpler than traditional methods and can be performed in just a few steps.

If required, the HELP function will guide the operator step by step through the procedure. The result is automatically calculated, displayed and printed out.



Reliable

CDR WineLab® guarantees high sensitivity, a wide measuring range and excellent repeatability of the results thanks to the innovative photometric technology using LED light sources and fixed wavelengths ranging from the ultraviolet to the visible spectrum (with a range of 0 to 6 optical density). **The analysis results are correlated with those of the reference methods.**

Pre-filled and disposable reagents are packaged in bags of 10 tests, developed and produced by the CDR research laboratories.



TEST	Measuring range	Resolution	Repeatability	Test time
Alcohol content	0.10 - 2.00 % vol.	0.01 % vol.	0.03 % vol.	11 mins
	2.0 - 17.0 % vol.	0.1 % vol.	0.2 % vol.	
Total acidity	1.0 - 10.0 g/L of tartaric acid	0.1 g/L	0.2 g/L	1 min
Acetic acid	0.05 - 1.20 g/L	0.01 g/L	0.06 g/L	6 mins
Sugars (glucose, fructose) in wine	0.1 - 18.0 g/L	0.1 g/L	0.1 g/L	6 mins
Sugars (glucose, fructose) in must	15 - 350 g/L	1 g/L	2 g/L	6 mins
Sugars (glucose, fructose, sucrose) in wine	4.0 - 100.0 g/L	0.1 g/L	0.7 g/L	16 mins
Sugars (glucose, fructose, sucrose) in must	15 - 350 g/L	1 g/L	2 g/L	16 mins
Glucose and fructose in wine	0.1 - 18.0 g/L	0.1 g/L	0.1 g/L	4 mins
Glucose and fructose in must	15 - 350 g/L	1 g/L	2 g/L	4 mins
Free SO ₂	1 - 60 mg/L	1 mg/L	2 mg/L	1 min
Total SO ₂	15 - 250 mg/L	1 mg/L	6 mg/L	1 min
L-Malic acid	0.05 - 5.00 g/L	0.01 g/L	0.08 g/L	4 mins
L-Lactic acid	0.05 - 4.00 g/L	0.01 g/L	0.05 g/L	6 mins
Malolactic	0.05 - 5.00 g/L	0.01 g/L	0.08 g/L	9 mins
pH	3.00 - 4.00	0.01	0.02	1 min
Glycerol	50 - 800 mg/L	1 mg/L	11 mg/L	3 mins
	2.0 - 15.0 g/L	0.1 g/L	0.2 g/L	
Gluconic acid	0.05 - 3.00 g/L	0.01 g/L	0.04 g/L	4 mins
Galacturonic acid	0.03 - 2.00 g/L	0.01 g/L	0.04 g/L	4 mins
Acetaldehyde	18 - 300 mg/L	1 mg/L	6 mg/L	6 mins
Yeast Assimilable Nitrogen (organic, inorganic)	30-300 mg/L	1 mg/L	15 mg/L	4 mins
Calcium	20.0 - 250.0 ppm	0.1 ppm	3.9 ppm	1 min
Copper	0.05 -120 ppm	0.01 ppm	0.09 ppm	6 mins
Total Polyphenols Index O.D. 280 nm	2 - 3000 mg/L gallic acid	1 mg/L	65 mg/L	10 mins
	1.0 - 140.0 O.D.	0.1 O.D.	3.1 O.D.	
Polyphenols FC	150 - 3300 mg/L gallic acid	1 mg/L	89 mg/L	5 mins
Total anthocyanins	50 - 1700 mg/L	1 mg/L	11 mg/L	6 mins
Anthocyanins Extraction on grapes	15 - 75%	1%	2%	6 mins +30 mins extraction
Polymerised Anthocyanins	10.0 - 100.0 %	0.1 %	0.5 %	11 mins
Catechins	1.0 - 30.0 mg/L	0.1 mg/L	0.7 mg/L	10 mins
Tannins	0.3 - 5.5 g/L	0.1 g/L	0.1 g/L	1 min
HCl Index	5 - 50	1	3	1 min*
Colour (Intensity and tonality)	10.000 - 40.000 Intensity	0.001	0.1	1 min
	0.000 - ∞ Tonality	0.001	0.05	
	0.000 - 13.500 420 nm reading	0.001	0.072	
	0.000 - 13.500 520 nm reading	0.001	0.072	
	0.000 - 13.500 620 nm reading	0.001	0.072	

*The analysis includes a sample incubation time of 7 hours.

CDRWineLab®

CDRWineLab® Jr



Analyses	Complete analysis panel	Customisable configuration
Samples that can be analysed simultaneously	16	3
Multitasking Mode	Yes	No
Calibration	Pre-calibrated No periodic calibration is necessary	Pre-calibrated No periodic calibration is necessary
Maintenance costs	No	No
Storage of results	Sufficient internal memory for storing thousands of analysis results in CVS and XML files compatible with all database formats (e.g., XLS, SQL)	Sufficient internal memory for storing thousands of analysis results in CVS and XML files compatible with all database formats (e.g., XLS, SQL)
Photometric module	Up to 6 wavelengths in 4 reading cells	Up to 6 wavelengths in 4 reading cells
Incubation module	37 ° C thermostated block with 16 positions	37°C thermostated reading block with 3 positions with incubation function
Connection with barcode and QR code scanners	Yes, via Bluetooth	No
Display	5.7" TFT colour LCD with touch screen	4.3" TFT colour LCD with touch screen
Connectivity	1 USB port type B for transferring the performed analysis database, configuration and software update, PC connection 1 USB port type A for technical service and computer connection 1 Ethernet port (LAN) for connection to intranet Bluetooth 4.0	1 USB port type B for transferring the performed analysis database, configuration and software update, PC connection Bluetooth 2.1
Printer	80 mm wide printer with integrated graphics	Wireless connection for external printer
Dimensions and weight	32 x 29.5 x 13 cm (W x D x H) 2.80 kg	15 x 22 x 8,3 cm (W x D x H) 0,80 Kg
Power supply	24 V	24 V or optional lithium-ion battery

rev 7.0

CDRWineLab®

CDRWineLab®, system of **FOODLAB®** line, is a trademark of CDR S.r.l. Phone. +39.055.871431 • Fax +39.055.8714322
Via degli Artigiani, 6 • 50055 Ginestra Fiorentina • Florence - ITALY • info@cdrwinelab.com - www.cdrwinelab.com

