

# CDRWineLab®

Analysis system  
for wine quality  
control



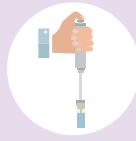
### CDR WineLab® system

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.



Wine	TEST	Measuring range	Resolution	Repeatability	Test time
	Alcohol content	0.10 - 2.00 % vol. 2.0 - 17.0 % vol.	0.01 % vol. 0.1 % vol.	0.03 % vol. 0.2 % vol.	11 mins
	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 <sub>2</sub>	1 - 60 mg/L	1 mg /L	2 mg /L	1 min
	Total SO <sub>2</sub>	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 2.0 - 15.0 g/L	1 mg/L 0.1 g/L	11 mg/L 0.2 g/L	3 mins
	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 1.0 - 140.0 O.D.	1 mg/L 0.1 O.D.	65 mg/L 3.1 O.D.	10 mins
	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 0.000 - ∞ Tonality 0.000 - 13.500 420 nm reading 0.000 - 13.500 520 nm reading 0.000 - 13.500 620 nm reading	0.001 0.001 0.001 0.001 0.001	0.1 0.05 0.072 0.072 0.072	1 min

\*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

## CDRWineLab®

CDR WineLab®, system of **FOODLAB®** line, is a trademark of CDR S.r.l. Phone. +39.055.871431 • Fax +39.055.8714322  
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