Analysis on wine with CDR WineLab®

TEST	Measuring range	Repeatability	Resolution	Testing time
Sugars in wine	0.1 - 18.0 g/L	0.2 g/L	0.1 g/L	6 min
+ Sugars in must sparkling wine	15 - 350 g/L	2 g/L	1 g/L	6 min
* Glucose and fructose in wine	0.1 - 18.0 g/L	0.2 g/L	0.1 g/L	6 min
*Glucose, fructose must, sparkling wine	15 - 350 g/L	2 g/L	1 g/L	6 min
Free SO₂	1 - 60 mg/L	1.5 mg/L	1 mg/L	2 min
Total SO₂	15 - 250 mg/L	2.5 mg/L	1 mg/L	1 min
L-Malic acid	0.05 - 5.00 g/L	0.05 g/L	0.01 g/L	4 min
L-Lactic acid	0.05 - 4.00 g/L	0.05 g/L	0.01 g/L	6 min
* Malolactic fermentation	0.05 - 5.00 g/L	0.05 g/L	0.01 g/L	10 min
Total acidity	1.0 - 10.0 g/L tartaric acid	0.13 g/L	0.1 g/L	1 min
Acetic acid	0.05 - 1.20 g/L	0.02 g/L	0.01 g/L	6 min
На	3.00 - 4.00	0.02	0.01	1 min
Alcohol by volume	0.1 - 17.0% vol.	0.2% vol.	0.1% vol.	11 min
Organic nitrogen	30 - 300 mg/L	2 mg/L	1 mg/L	4 min
Inorganic nitrogen	30 - 300 mg/L	2 mg/L	1 mg/L	4 min
Acetaldehyde	18 - 300 mg/L	2 mg/L	1 mg/L	6 min
Glycerol	2.0 - 15.0 g/L	0.3 g/L	0.1 g/L	6 min
Gluconic acid	0.05 - 3.00 g/L	0.05 g/L	0.01 g/L	4 min
Copper	0.05 - 1.20 mg/L	0.03 mg/L	0.01 mg/L	5 min
Antocyanes	10 - 1000 mg/L cyanidin-3-0-glucoside	15 mg/L	1 mg/L	1 min + 60 min for extraction
Polyphenols FC	150 - 3300 mg/L gallic acid	10 mg/L	1 mg/L	5 min
* Catechins in wine	1 - 30 mg/L	2 mg/L	1 mg/L	11 min
*Total polyphenol index (O.D. 280nm)	1.0 - 100.0 O.D. 280 nm	0.4 O.D. 280 nm	0.1 O.D. 280 nm	11 min
*Intensity I-O.D.420+O.D.520+O.D.620	1.0 - 40.0 O.D.	0.002 O.D.	0.001 O.D.	1 min
*Tonality T=0.D.420/0.D.520	∞	0.002 O.D.	0.001 O.D.	1 min
	* Sugars in wine *Sugars in must sparkling wine * Glucose and fructose in wine * Glucose, fructose must, sparkling wine Free SO2 L-Malic acid L-Lactic acid * Malolactic fermentation Total acidity Acetic acid pH Alcohol by volume Organic nitrogen Inorganic nitrogen Acetaldehyde Glycerol Gluconic acid Copper Antocyanes Polyphenols FC * Catechins in wine * Total polyphenol index (O.D. 280nm) *Intensity I-O.D.420+O.D.520+O.D.620 *Tonality	Sugars in wine *Sugars in must sparkling wine *Glucose and fructose in wine *Glucose, fructose must, sparkling wine *Glucose, fructose must, sparkling wine *Total SO ₂ L-Malic acid *Malolactic fermentation Total acidity *Acetic acid *Acetaldehyde *Acetaldehyde	**Sugars in wine	Sugars in wine 0.1 - 18.0 g/L 0.2 g/L 0.1 g/L +Sugars in must sparkling wine 15 - 350 g/L 2 g/L 1 g/L *Glucose and fructose in wine fructose in wine 0.1 - 18.0 g/L 0.2 g/L 0.1 g/L *Glucose, fructose must, sparkling wine 15 - 350 g/L 2 g/L 1 g/L Free SO₂ 1 - 60 mg/L 1.5 mg/L 1 mg/L L-Malic acid 0.05 - 5.00 g/L 0.05 g/L 0.01 g/L L-Hactic acid 0.05 - 5.00 g/L 0.05 g/L 0.01 g/L * Malotactic fermentation 0.05 - 5.00 g/L 0.05 g/L 0.01 g/L Total acidity 1.0 - 10.0 g/L tartaric acid 0.13 g/L 0.1 g/L Acetic acid 0.05 - 1.20 g/L 0.02 g/L 0.01 g/L Acetic acid 0.05 - 1.20 g/L 0.02 g/L 0.01 g/L pH 3.00 - 4.00 0.02 0.01 Alcohol by volume 0.1 - 17.0% vol. 0.2% vol. 0.1% vol. Organic nitrogen 30 - 300 mg/L 2 mg/L 1 mg/L Inorganic nitrogen 30 - 300 mg/L 2 mg/L

^{*}Not available with the **CDR WineLab*** **Junior**.

CDR WineLab® Junior is configured as you like.







⁺In addition to sugars determination (glucose and fructose) it is possible to detect sucrose as well.

THE SYSTEM

CDR WineLab® is composed of a thermostated analyzer based on photometric technology that uses LED; a kit with disposable pre-vialed reagents with low toxicity, in package of 10 tests, 1 year shelf life, developed and produced by the research laboratories of CDR.







Just few steps are required to perform a test. The **HELP function** on the display will lead you step by step through the process.

REDUCED TESTING TIMES

With CDR WineLab® now it is possible to perform the analyses autonomously, in your own winery, easily and rapidly, without relying on dedicated external laboratories. It is possible to analyze 16 samples at the same time (with the CDR WineLab® model) and to monitor constantly the production process, obtaining in few minutes exact and accurate answers.

EASY TO USE

The system is designed to be used by anyone, without the support of skilled staff.

The analysis methods are easier than the traditional ones and can be performed in few steps:

1 Adding the sample volume to the pre-vialed reagent.

2 Following the displayed instructions and if there is ever a doubt, the **HELP function** will lead you through the process.

3 Results are automatically calculated, displayed and printed.

RELIABLE

This measuring system owes its **sensitivity**, **accuracy and reliability** to the photometric technology based on LED luminous sources.

The results of the analyses are correlated with the reference methods.









Full panel of analysis

Tailored panel of analysis

Display				
5.7" TFT color LCD touchscreen	4.3" Wide TFT color LCD touchscreen			
Connectivity				
2 USB 2.0 to transfer the database of performed tests and update the configuration and software	1 USB type B for technical service and PC connection			
1 USB type B for technical service and PC connection	Bluetooth 2.1			
1 Ethernet (LAN)				
Storage of results				
Internal memory to store thousands results of analyses in CSV and XML files, compatible with all database formats (e.g.:XLS, SQL).	Internal memory to store thousands results of analyses in CSV and XML files, compatible with all database formats (e.g.:XLS, SQL).			
Photometric module				
6 different wavelengths in 4 reading cells	6 different wavelengths in 4 reading cells			
Incubation module				
37°C thermostated block with 16 positions	37°C thermostated block with 3 positions			
Number of samples you can analyze at the same	time			
16	3			
Multitasking mode (possibility to perform more a	nalyses on the same sample)			
Yes	No			
Printer				
Graphic printer on board 80 mm width	Absent			
Dimension 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 lithium ion battery (optional)			
Configuration / Analyses				
Configuration with the full panel of analyses	Configuration with tailored panel of analyses			