Analysis system for kombucha quality control

CDRKombuchaLab



CDR KombuchaLab system

CDR KombuchaLab 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 KombuchaLab** you are finally free to carry out the analyses independently, in during the production process, 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 KombuchaLab 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.



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	TESTS	Measuring range	Resolution	Repeatability	Testing time
	Alcohol By Volume	0.10-1.80 % vol. 1.0-10.0 % vol.	0.01 % vol. 0.1 % vol.	0.02 % vol. 0.1 % vol.	11 mins 11 mins
	Total polyphenols index O. D. 280 nm	1.0 – 140.0 O.D.	0.1 O.D.	3.1 O.D.	10 mins
Kombucha	Acetic acid	0.05-1.20 g/L 1.0-15.0 g/L	0.01 g/L 0.1 g/L	0.06 g/L 0.3 g/L	6 mins
	Sugars (glucose, fructose, sucrose)	4.0-100.0 g/L	0.1 g/L	0.7 g/L	11 mins
	L-Malic acid	0.05-5.00 g/L	0.01 g/L	0.08 g/L	4 mins
	L-Lactic acid	50-3500 ppm	1 ppm	73 ppm	10 mins
	Glycerol	50-800 mg/L	1 mg/L	11 mg/L	3 mins
		700-5000 mg/L	1 mg/L	99 mg/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
	Yeast Assimilable Nitrogen (organic, inorganic)	30-300 mg/L	1 mg/L	15 mg/L	4 mins
	Total Acidity	1.0-8.0 g/L of tartaric acid	0.1 mg/L	0.1 mg/L	1 min
	рН	3.00 – 4.50	0.01	0.01	1 min

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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 $^{\circ}$ C thermostated block with 16 positions	37°C thermostated reading block with 3 positions with incubation function			
Connection with barcode a	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 USB port type B for transferring the performed analysis database, configuration and software update, PC connection			
	1 Ethernet port (LAN) for connection to intranet Bluetooth 4.0	Bluetooth 2.1			
Printer					
	80 mm wide printer with integrated graphics	Wireless connection for external printer			
Dimensions and weight	ensions and weight				
	$32 \times 29.5 \times 13$ 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			













