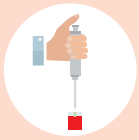
CDRFoodLab®

Analysis system for quality control of bakery products and spreads

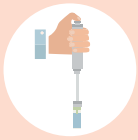
CDR FoodLab® system

CDR FoodLab® 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 FoodLab®** you are finally free to carry out the analyses independently, either in your quality control laboratory or directly on the production line, 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 FoodLab® 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.

CDRFoodLab®

Quality control of bakery products and spreads has never been so easy!

With **CDR FoodLab** ® analysis system, you can quickly and easily carry out **quality control on bakery products, sweet baked snacks, snacks and spreads, from the raw materials used (oils and fats, milk, eggs) to the finished product.** Sample preparation is quick and easy and does not involve the use of toxic solvents.

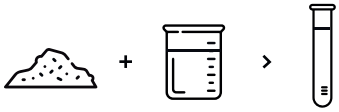
The rancidity and shelf-life of the finished product can be determined in 4 steps

With **CDR FoodLab**® it is possible to determine Acidity, Peroxides, p-Anisidine and calculate the TOTOX value of the extracted fat in order to monitor oxidation and ensure the quality of the finished product.

1

Chop the product to be analysed.

2



Weigh 10 g of product and add 5 ml of Extrafluid reagent.

3

Centrifuge at a minimum speed of 5000 rpm. **10 minutes**

4

Remove the extracted oil and proceed with the analysis. **5 minutes**

	Analysis	Measuring range	Resolution	Repeatability
Finished product	Acidity (FFA)	0.01 - 1.10% oleic acid	0.01 % oleic acid	0.05 % oleic acid
	Peroxide value	0.01-15.00 meqO_2/Kg	0.01 meqO_2/Kg	0.30 meqO_2/Kg
	p-Anisidine	0.5 - 100.0 AnV	0.1 AnV	2.5 AnV

CDRFoodLab®

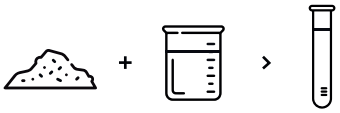
How to determine Alcohol content and Lactose

With **CDR FoodLab** ® it is possible to determine the lactose content of lactose-free products and the alcohol content of the finished product. In addition to bakery products, the determination of alcohol concentration can also be carried out in preservative solution, i.e. in the alcoholic solution used as a preservative and antibacterial agent.

1

Chop the product to be analysed.

2



Weigh the chopped product and add distilled water according to the method.

3

Centrifuge at a minimum speed of 5000 rpm. **5 minutes**

4

Remove the sample and proceed with the analysis. **10 minutes**

	Analysis	Measuring range	Resolution	Repeatability
Finished product	Lactose	0.02-2.00 g/ 100 g	0.01 g/100 g	0.05 g/100 g
	Alcohol content (of the finished product)	0.02-2.50% vol	0.01% vol	0.02% vol
	Alcohol content (of the preservative solution)	1.0-10.0% vol	0.1% vol	0.1% vol

CDRFoodLab®	CDRFoodLab® Jr
Analyses on bakery products and spreads	
Complete analysis panel	Basic configuration: Peroxide Value, p-Anisidine Optional: Acidity (FFA), Alcohol content of the finish product, Alcohol content in preservative solutions, Lactose
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 8 wavelengths in 4 reading cells	Up to 8 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, PCconnection 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

CDRFoodLab®

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