

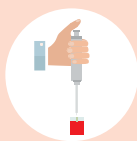
# CDR**Food**Lab®

Analysis system  
for **frying oil** quality  
control



## CDR FoodLab® system

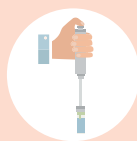
CDR FoodLab® consists of a thermostatically controlled analyser with photometric technology using LED emitters and kits of reagents that are pre-filled into vials and ready to use.



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.





**The quality control of frying oil has never been so easy!**

CDR FoodLab® is the analysis system for frying oil that simplifies and speeds up traditional quality control procedures.

It is **the ideal solution to monitor the degradation of frying, cooking and waste oil**, by determining Free Fatty Acids (FFA), Peroxide Value (PV), p-Anisidine Value (AnV) and Soaps.

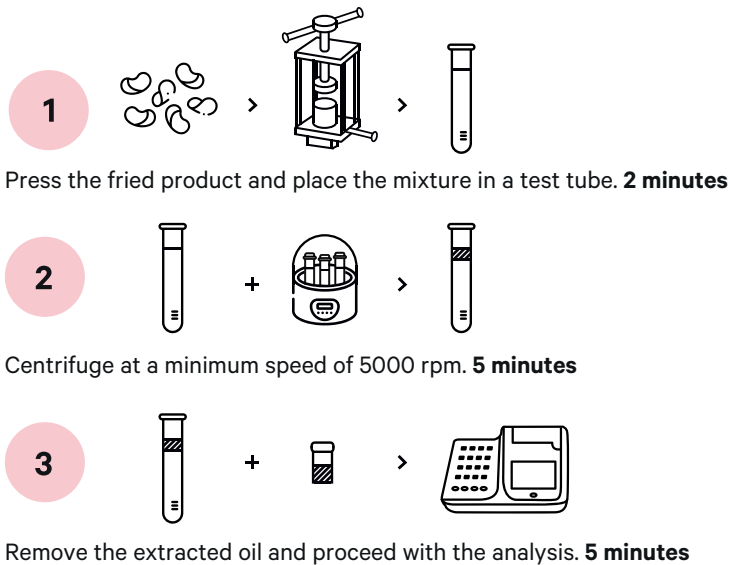
**Finished products (fried snacks) shelf life can be also determined by the periodically monitoring of oxidation status and rancidity of the oils they contain.**

Just a simple mechanical treatment is required to extract the oil from finished product.

On the extracted oil you can determine Free Fatty Acids (FFA), Peroxide Value (PV), p-Anisidine Value (AnV) and Soaps in just 5 minutes, avoiding the use of toxic solvents and complex instruments and methods.

**More tests with just one analyzer.**

**How to analyze fried snacks in 3 steps and few minutes**



Frying oil	TEST	Measuring range	Resolution	Repeatability	Test time
	Acidity (FFA)	0.01 - 1.10 % of oleic acid	0.01 % of oleic acid	0.02 % of oleic acid	1 min
		1.0 - 3.5 % of oleic acid	0.1 % of oleic acid	0.1 % of oleic acid	1 min
		1.0 - 26.0 % oleic acid	0.1 % of oleic acid	0.5 % of oleic acid	1 min
	Peroxides value	0.01 - 5.50 meqO <sub>2</sub> /Kg	0.01 meqO <sub>2</sub> /Kg	0.05 meqO <sub>2</sub> /Kg	3 mins
		0.30 - 25.00 meqO <sub>2</sub> /Kg	0.01 meqO <sub>2</sub> /Kg	0.24 meqO <sub>2</sub> /Kg	3 mins
		1.0 - 50.0 meqO <sub>2</sub> /Kg	0.1 meqO <sub>2</sub> /Kg	0.5 meqO <sub>2</sub> /Kg	3 mins
		4.0 - 550.0 meqO <sub>2</sub> /Kg	0.1 meqO <sub>2</sub> /Kg	5.2 meqO <sub>2</sub> /Kg	3 mins
	p-Anisidine Value	0.5 - 100.0 AnV	0.1 AnV	0.7 AnV	1 min
	Soaps	1 - 300 ppm	1 ppm	9 ppm	1 min
50 - 1350 ppm		1 ppm	38 ppm	1 min	
100 - 3000 ppm		1 ppm	77 ppm	1 min	

# CDRFoodLab®



# CDRFoodLab® Jr



<b>Analyses on frying oil</b>		
	Complete analysis panel	Basic configuration: Acidity (FFA), Peroxide Value Optional: p-Anisidine Value, Soaps
<b>Samples that can be analysed simultaneously</b>		
	16	3
<b>Multitasking Mode</b>		
	Yes	No
<b>Calibration</b>		
	Pre-calibrated No periodic calibration is necessary	Pre-calibrated No periodic calibration is necessary
<b>Maintenance costs</b>		
	No	No
<b>Storage of results</b>		
	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)
<b>Photometric module</b>		
	Up to 8 wavelengths in 4 reading cells	Up to 8 wavelengths in 4 reading cells
<b>Incubation module</b>		
	37 ° C thermostated block with 16 positions	37°C thermostated reading block with 3 positions with incubation function
<b>Connection with barcode and QR code scanners</b>		
	Yes, via Bluetooth	No
<b>Display</b>		
	5.7" TFT colour LCD with touch screen	4.3" TFT colour LCD with touch screen
<b>Connectivity</b>		
	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
<b>Printer</b>		
	80 mm wide printer with integrated graphics	Wireless connection for external printer
<b>Dimensions and weight</b>		
	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
<b>Power supply</b>		
	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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