

CDR FoodLab® for milk and dairy products



Analyses on milk and dairy products

L-lactic acid, Ammonia, Chloride, Hydrogen peroxide, Alkaline phosphatase (ALP), ϵ -Fructosyl-lysine (Furosine), Peroxidase (POD), Free Fatty Acid, Peroxide value, Lactose, Urea.

WHAT IS THE CDR FOODLAB® SYSTEM?

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

ANALYSIS KITS

The use of pre-filled reagents and the analytical methods, developed by the research laboratories of CDR, allow: quick and easy sample preparation, when needed at all; analytical methods extremely fast and easy; removing all needs for calibration procedures.



REDUCED TESTING TIMES

CDR FoodLab® allows accelerating analysis procedures. It is possible to analyze 16 samples at the same time and constantly monitor the production process, obtaining exact and accurate answers in just a few minutes. The multitasking mode allows to manage the determinations of several analytical parameters at the same time. It allows the system to process one analysis and to start another one at the same time, with the possibility to go back to the first one at any moment.

of-the-art LED emitters at fixed wavelengths (from ultraviolet to the visible spectrum, up to 6 OD). The results of the analyses are correlated with the reference methods.



EASY TO USE

The system is designed to be used not only in a laboratory, but real time in the processing plant, even by staff with no previous specific lab tech experience.

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

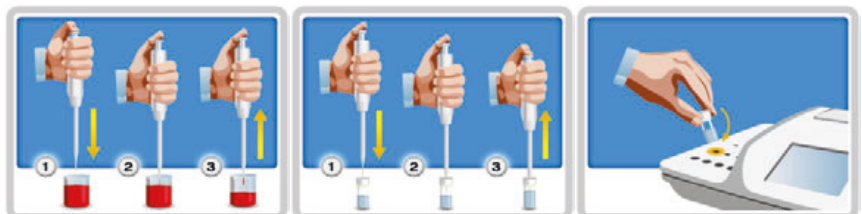


RELIABLE

The measuring system guarantees high sensitivity, a wide measuring range, and an excellent repeatability of the test results thanks to the photometric technology based on state-

- 1 Adding the sample to the pre-filled 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.

Each test is performed dispensing in the cuvette containing the reagent a determined amount of the sample. Thanks to the reagents created on purpose, it is generated a colorimetric reaction. The result of the test is printed immediately after the elaboration of the photometric reading, in its unit of measure.



CDR FoodLab® for milk and dairy products



The quality control of the production process of milk and dairy products has never been so easy!

With CDR FoodLab® you will be able to determine in a simple and rapid way L-lactic acid in milk, cream, cheese and yoghurt; ammonia in milk, cream, cheese and yoghurt; chloride in milk, cheese and aqueous solutions; alkaline phosphatase (ALP) in milk; hydrogen peroxide in milk; ϵ -Fructosyl-lysine (furosine) in milk; peroxidase (POD) in milk; Free Fatty Acid in butter, margarine and cream; peroxide value in butter, margarine and cream; lactose in milk, cheese and yoghurt; urea in milk. **Everything with just one analyzer.**

CDR FoodLab® analyzes:

Low-fat milk or whole milk, raw or pasteurized, **without any kind of previous sample treatment.**

Cheese, mozzarella, ricotta cheese, yoghurt, butter, margarine and other dairy products, **with an extremely easy sample preparation**, in comparison with the one requested by the official method.



Reagents are pre-vialed, in package of 10 tests, **1 year shelf life**, developed and produced by the research laboratories of CDR.



TESTS	Measuring range	Resolution	Repeatability
Lactose	0.01-5.50% lactose	0.01 %	0.02%
L-lactic acid	2.0 - 250.0 ppm lactic acid	0.1 ppm	3 ppm
Ammonia	1.00 - 80.00 ppm of NH ₃	0.01 ppm	3 ppm
Chloride	50 - 400 mg/dL NaCl	1 mg/dL	5 mg/dl
Urea	5.0 - 100.0 mg/dL Urea	0.1 mg/dL	0.5 mg/dL
Hydrogen peroxide	1.5 - 25.0 ppm H ₂ O ₂	0.1 ppm	3 ppm
ϵ -Fructosyl-lysine *Furosine	10 - 1000 U/L 10.0 - 500.0 mg/100 g	1 U/L 0.1 mg/100 g	50 U/L 0.5 mg/100 g
Free Fatty Acid on fats	0.01 - 1.10 % oleic acid	0.01%	0.02%
Peroxide value on fats	0.01 - 5.50 meqO ₂ /Kg	0.01 meqO ₂ /Kg	0.1 meqO ₂ /Kg
Peroxidase (POD) *Seroprotein	100 - 8000 U/L 13.60 - 17.70 %	1 U/L 0.01 %	100 U/L 0.1 %
ALP Alkaline phosphatase	0.10 - 7.00 U/L of ALP	0.10 U/L	0.1 U/L

*Indirect determination

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