

cdR PalmOilTester

Analysis System for Palm Oil



Palm Oil

Acidity (FFA)

Peroxide value (PV)

p-Anisidine value (AnV)

Carotene content

Iodine value

DOBI



STRENGTHS

CDR PalmOilTester is composed of a thermostated analyzer based on **photometric technology** that uses LEDs instead of usual tungsten lamps. This, with specific software, innovative analytical procedure and **dedicated reagents**, makes the CDR PalmOilTester a unique and advanced analysis system. Reagents are developed and produced by the research laboratories of CDR.

REDUCED TESTING TIME

Now it is possible to perform an analysis quickly and easily without relying on a dedicated external laboratories. **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.

RELIABLE

This measuring system owes its sensitivity, accuracy and reliability to the photometric technology based on LED luminous sources. The **results** of the analysis are **correlated** with the **reference methods**.

REAGENTS



A set of **reagents** prepared by **CDR research laboratories**.
Reagents are supplied **pre-vialled** or in **bottle** with **1 year shelf-life**.



Free Fatty Acids (FFA), peroxide value (PV), p-Anisidine value (AnV) carotene content, iodine value and DOBI. You can determine them in 10 minutes, in a simple way with pre-validated and low environmental impact reagents, in respect of operator's safety, abandoning the use of toxic solvents, extractor hoods, complex analytical instruments and complicated methods.

Free Fatty Acids (FFA)

This testing method is simpler and faster as compared to the official method.

It guarantees high levels of accuracy and sensitivity, and is able to detect differences down to 0.01% of palmitic / lauric acid. Unlike NIR systems, this method does not require calibration. **Results are output in 1 minute.**

Peroxide Value

This testing method is simpler and faster when compared to titration used in the official method. The amount of reagent required is much smaller than the one used with the official method. The reagents used have a low toxicity, unlike those employed in the official method that are highly toxic and polluting. **Results are output in 4 minutes.**

Anisidine Value

This testing method is easier and faster as compared to the official method. **It takes only 2 minutes for each test.** It does not require dedicated instrumentation and technical staff. It does not involve handling of highly toxic reagents.

Iodine Value

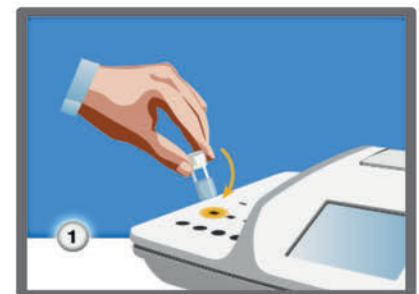
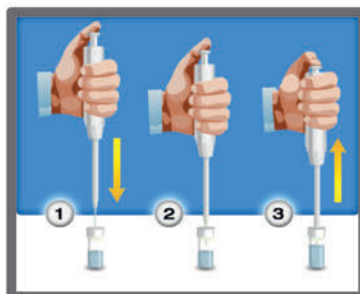
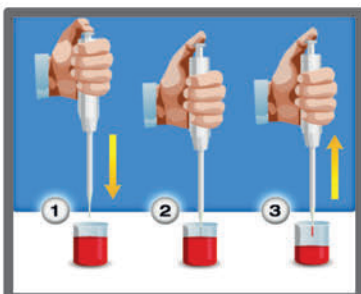
This is a valid screening test. It is easier and faster as compared to the official method. It does not require glassware. It involves small amount of low-toxic reagents when compared to official method that requires a large amount of very toxic and polluting reagents.

DOBI & Carotene Content

This testing method is easier and faster as compared to the official method. It does not require complex and expensive instrumentation. It does not involve toxic reagents. It does not require glassware. It detects two important parameters, for crude palm oil quality, by doing a single test.

TESTS	Measuring range	Resolution	Repeatability
Free Fatty Acids	0,01-0,54% palmitic acid	0,01% palmitic acid	0,02% palmitic acid
	1-12,6% palmitic acid	0,1% palmitic acid	0,1% palmitic acid
	0,01-0,45% lauric acid	0,01% lauric acid	0,02% lauric acid
	1-10,6% lauric acid	0,1% lauric acid	0,1% lauric acid
Peroxide Value	0,1-5,5 meqO ₂ /Kg	0,01 meqO ₂ /Kg	0,1 meqO ₂ /Kg
	0,3-11 meqO ₂ /Kg	0,01 meqO ₂ /Kg	0,1 meqO ₂ /Kg
	0,3-25 meqO ₂ /Kg	0,01 meqO ₂ /Kg	0,3 meqO ₂ /Kg
	1-50 meqO ₂ /Kg	0,1 meqO ₂ /Kg	0,3 meqO ₂ /Kg
p-Anisidine	0,5-100	0,1	0,5
Iodine Value	2 - 100 g/100g	1 g/100g	2 g/100g
DOBI	0,1-20	0,01	0,1
Carotene content	0,1-1500 ppm	0,1 ppm	5 ppm

FAST, SIMPLE, RELIABLE.



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-validated 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.