



## UNIPHOS FREE FATTY ACID (FFA) METER

### UNIPHOS - FFA METER

Uniphos Free Fatty Acid (FFA) Meter is a microprocessor based portable instrument that measures the acid value of oil samples. The fatty acids in the oil get detached from the triglycerides during processing or improper storage. The free fatty acids contribute to oil rancidity and cause deterioration and off flavour of the oil. The lower the FFA, the better is the oil quality and its preservation status.

For measurement, the sample oil is treated with reagents to form a colored dye. The instrument measures the absorbance of the colored dye and relates it to the free fatty acids as % of Oleic acid. The instrument is previously calibrated using FFA standard Oleic acid of known concentration.



#### Sensor Specifications

Light Detector	Silicon Photodiode
Detector Life	50,000 hours
Operating Temperature	0 to 50°C (32 to 122 °F)

#### SALIENT FEATURES:

- Portable with rechargeable Battery
- Comprehensive procedure for sample preparation
- Drastic reduction in reagents and sample in comparison to conventional lab method
- Quick Analysis of sample in <5 minute
- No use of hazardous chemicals

#### INSTRUMENT SPECIFICATIONS:

Measurement Principle	Absorption Method	
Measurement Range	Absolute Measuring range: 0 – 2 % as Oleic Acid (With dilution, Range can be extended up to 20 % as Oleic Acid)	
Resolution	0.01 %	
Accuracy	0 to 0.3 % : ± 0.03, 0.3 to 20 %: ± 5% of the reading.	
Minimum detection limit	0.1 %	
Calibration Interval	6 months	
Physical Dimensions	Length	21.5 cm
	Width	16.5 cm
	Height	9.5 cm
	Weight	0.870 Kg
Power Requirements	Battery Operated - 7.6 V	
Accessories	Cuvettes (1 pair), Charger, USB Cable, PP Vials -10 Nos	

\*Due to continuous development we reserve the right to change the specifications without prior notice



# UNIPHOS PEROXIDE VALUE (PV) METER

## UNIPHOS - PV METER

Uniphos Peroxide Value (PV) Meter is a microprocessor based portable instrument measures the peroxide value of oil samples. Peroxides are the primary products of oil oxidation and their identification determines the oil rancidity. The lower the peroxide value, the better is the oil quality and its preservation status.

For measurement, the sample oil is treated with reagents to form a colored dye. The instrument then measures the absorbance of the colored dye and relates it to the peroxide value of the oil. PV is defined as the amount of peroxide oxygen per 1 kilogram of fat or oil. It is expressed in units of milli-equivalent per Kg, commonly abbreviated as meq/Kg.



### Sensor Specifications

Light Detector	Silicon Photodiode
Detector Life	50,000 hours
Operating Temperature	0 to 50°C (32 to 122 °F)

### SALIENT FEATURES:

- Portable with rechargeable Battery
- Comprehensive procedure for sample preparation
- Drastic reduction in reagents and sample in comparison to conventional lab method
- Quick analysis of sample in <5 minutes
- No use of hazardous chemicals

### INSTRUMENT SPECIFICATIONS:

Measurement Principle	Absorption Method	
Measurement Range	Absolute Measuring range: 0 - 10.0 meq/kg. (With dilution, Range can be extended upto 250 meq/Kg)	
Resolution	0.01 meq/kg	
Accuracy	0 -1 meq/kg: $\pm 0.2$ , 1.0 to 10.0 meq/kg: $\pm 5\%$ of the reading	
Minimum detection limit	0.2 meq/Kg	
Calibration Interval	6 months	
Physical Dimensions	Length	21.5 cm
	Width	16.5 cm
	Height	9.5 cm
	Weight	0.870 Kg
Power Requirements	Battery Operated -7.6 V	
Accessories	Cuvettes (1 pair), Charger, USB Cable, PP Vials -10 Nos	

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ISO 14001

BUREAU VERITAS  
Certification



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