



**Mayura Analytical** LLP  
Specialists in Analytical Instrumentation

## **Auto KF Titrator – Model KF-II**

*Mayura Analytical LLP is a leading organisation in analytical instrumentation that provides solutions to research institutions and industries to diagnose and resolve their analytical needs. Our pioneering products are made in India for the Indian market and beyond since our inception in 1984. We are widely acknowledged for our approach to chemical analysis and to customer troubleshooting. As recognised suppliers of analytical equipment to the **Indian Institute of Science (IISc), Bangalore and Indian Institute of Technology (All India)**, preeminent research and technology institutions of India as well as large industries such as **BIOCON**, we have cemented our standing in the market with our cutting edge expertise and solution focussed approach.*

### ***Application of the Mayura Analytical Auto KF titrator KF-II***

The KF-II is widely accepted equipment for moisture estimation in high percentages to very low percentages with a **dosing resolution of 0.001ml**. We have analysed moisture contents in samples with low moisture content such as epoxy resin, araldite, honey, non-polar solvents like methylene dichloride, hexane to samples with high moisture contents such as milk and sucrose. Our equipment is probably the first to conceive the idea of weighing samples of this sticky, non-transferrable nature from few grams to few milligrams and implement this in a very easy manner. We have supplied this equipment to very reputed customers in India. This highly economical and standalone titrator is very user friendly and requires no computer for operations. With a dot matrix printer, it is a real workhorse at a number of industries that use the equipment around the clock.





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## *Features*

In order to support these applications, the KF-II comes with a range of features to make analysis simpler and accurate.

- Automatic dead end point
- Memory storage for results (data files) and methods used
- Automatic FILL, TITRATE and RINSE mode for reagent saving
- Water content from PPM to 100%.
- 1 µl dosing and measuring
- Automatic calculations of results
- Reprocessing of data from memory
- Results in PPM, mg or 100% units
- LCD alphanumeric display
- Alphabetical and numerical keyboard
- Printout of results and methods

## *Specifications*

- Liquid delivery : Stepper motor driven burette
- Burette volume : 20 mL nominal
- **Minimum dosing** : **0.001 mL (1 µl)**
- Maximum dosing : 99.999 mL per titration
- Valve mechanism : To route the liquid flow in the selected direction.  
Electrically driven valve of chemically inert PEEK material of low dead volume
- End point delay : 0 - 99 secs, user selection



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- End point control : Automatic slow down on nearing the end point for accurate titration
- Moisture range : 5 PPM to 100%
- Printer port : 25 Pin D connector
- Power : 220V AC 50 Hz

## *Equipment description*

- Display (LCD) : Alphanumeric backlit 16 characters with dual line display
- Date : DD : MM : YY
- Time : HH : MM
- Keyboard : 15 Keys with alpha- numerical and operational functions
- Titration setup : Glass vessel of 30ml capacity, mounted on an electronically regulated magnetic stirrer
- Titration : Ports for jet, electrode and sample
- Electrode : Dual platinum with 9 pin D connector.
- Dosing jet : Teflon with very fine outlet for  $\mu$ l dosing

## *Operational functions*

- Set up : FILL, DOSE and RINSE
- Titration modes : Blank ( Blk)  
Standard (Std)  
Sample (Samp)



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- Method : Selection of operation functions as shown below  
Stir time  
Titration Speed  
End Point Delay  
End Point Milli volt  
KF Factor  
Density
  
- Memory storage : EEPROM memory storage of 102 files
- File operations : 51 method files (0-50)
- Printing title : Company Name and user entry 16 characters
- Sample name : 8 Characters
- Batch number : 8 Characters
- Printing : Inkjet or Dot matrix (80 columns) printer  
Standardisation report and moisture estimation report  
Method parameters
- Calculations : % and PPM
- Remarks : User entry of 64 characters