

Automatic Programmable Melting Point Apparatus

Model: μ ThermoCal50 | Make: ANALAB | HSN Code: 90278990



Supplied with Melting Capillary One End Sealed (Pack of 100 Nos.), Boiling Tube, Sample Tapping Rod, Two Melting Standards 49°C and 238°C, Forceps, Power Cord, Operational & Instruction Manual with SOP, Calibration Test Certificate (Without Traceability Document) and Warranty Card.



Technical Specification:

Temperature Controller	: Microcontroller Based
Detection Principal of Melting Point	: Automatic by Silicon Photodiode
Heating Media	: By Aluminum Block
Temperature Range	: +5°C above ambient to 400°C
Temperature Accuracy	: A) 10°C above ambient to 100°C $\pm 0.2^{\circ}\text{C}$ B) 101°C to 200°C $\pm 0.4^{\circ}\text{C}$ C) 200°C to 400°C $\pm 0.5^{\circ}\text{C}$
Readability	: 0.1°C
Overheating Protection	: In-built - Set by user in method parameter
Heating Before EMP*	: Automatic heating depending upon temperature difference
Heating Rate	: 0.2, 0.5, 1.0, 2.0, 3.0 & 5.0 °C/min - Selectable
Maximum Heating Time	: Around 6 minutes from 50°C to 350°C
Maximum Cooling Time	: Around 6 minutes from 350°C to 50°C
Detection of Melting	: A) Melting Point B) Melting Range
Type of Detection	: Auto / Manual (Color sample can be analysed by Manual detection.)
Melting Point Average Reading	: For three same sample
Melting Capillary Ports	: Three - one sample at a time
Detection of Boiling Point	: Manually by viewing in TFT Display
Boiling Tube	: One
Calibration	: Eight Calibration Standards (Six as per Pharmacopeia AND / OR Customer's known standards)
Method	: 40 methods for Melting sample, 10 for Boiling sample and 1 for unknown sample with View, Print & Delete facility.
Temperature Sensor	: Duplex PT-100, One for internal use and One for calibration purpose by external Source.
Glass Melting Capillary	: OD: 1.4 to 1.6mm ID: 1.0mm Length: 100mm One End Sealed
Sample Filling Height	: 3mm
Magnification	: 5x
Viewing of Capillary	: Camera with TFT Display for viewing Melting Capillary and Boiling Tube in CAPillaryVIEW
Display	: 20 x 4 Line Alphanumeric Backlit LCD

Keypad	: Membrane waterproof polycarbonate soft touch keypad compliance to UL/ROHS
Calibration Data Storage	: Non-Volatile Memory which can store, print & view calibration date & time, company name, standard name with temperature, actual reading of standard temperature, calibration done by, instrument serial number, instrument ID, model number etc.
Analysis Data Storage	: More than 750 analysis data can be stored with corresponding calibration data, analysis date & time, record number, Batch number / ID, sample name, username, assigned method number, MP1 (On set temperature) & MP2 (Clear temperature) reading of all three reading, instrument ID, serial number, model number, make, etc. Secondly , analysis data can be print online without saving in Instrument.
Searching of data	: With record number, batch number/ID, date, date range and by scrolling.
Report Formation	: As per GLP Compliance
Password Protection	: Date & Time, Calibration Mode, Analysis Mode, Delete Stored Analysis Data, Method Data and Restore Factory Set Calibration Data.
Printer Interface	: Centronics Parallel Port/ Serial (RS-232 C) Port
Printer	: 40 / 80 Column Dot Matrix Printer (Printer to be procure optionally)
Power Supply	: 230 VAC $\pm$ 10%, 50 Hz

* EMP : Expected Melting Point

Optional

1. IQ/OQ/PQ/DQ Documents

- Note:** a) Please provide Customer's Name & Address prior to dispatch.
 b) To perform onsite documentation, visit charge will be extra depending upon place of Installation.
 c) Traceability documents along with installation report.
 d) Standards / Chemicals / Buffers required to perform documents are in customer's scope.
 e) We don't send documents by email.

2. Calibration Standard Kit for Melting Point Apparatus - (ANALAB Certified)

Consist of 07 Melting Standards as specified bellow, Melting Capillary One End Sealed 100 mm Long (Pack of 100) – 02 Pack, Boiling Tube – 02 Nos., Sample Tapping Rod, Forceps, Glass for Heating Block – 02 Nos., Glass for Camera – 02 Nos.

Melting Standards :

- | | |
|--------------------------------------|--------------------|
| a) Benzophenone - Melting Range | : 47 - 49 °C |
| b) Vanillin - Melting Range | : 81 - 83 °C |
| c) Benzoic Acid - Melting Range | : 121.5 - 123.5 °C |
| d) Sulfanilamide - Melting Range | : 164 - 167 °C |
| e) Caffeine - Melting Range | : 235 - 238 °C |
| f) Phenolphthalein - Melting Range | : 258 - 262 °C |
| g) Potassium Nitrate - Melting Range | : 334 – 336 °C |

Note: Melting Range / Melting Point specified on standard bottle is re-pack based on the values of batch number specified by manufacturer and their COA.

3. GMP Enclosure made up of Stainless Steel

4. Keypad Screen Guard

5. Traceability Documents

Available other Models of Melting / Boiling Point Apparatus

- Microcontroller Based Melting/Boiling Point Apparatus Model: ThermoCal - Resolution: 1.0°C & Temp.: 300°C with Silicon Oil
- Microcontroller Based Melting/Boiling Point Apparatus Model: μ ThermoCal10 Resolution: 0.1°C & Temp.: 300°C with Silicon Oil
- Programmable Melting/Boiling Point Apparatus Model: μ ThermoCal25 Resolution: 0.1°C & Temp.: 300°C with Silicon Oil & Printing Facility as per Non-GLP Format
- Automatic Programmable Melting Point Apparatus Model: μ ThermoCal25+ with Manual Boiling Point, Block Technology, Resolution: 0.1°C, Temp.: 350°C & Printing Facility as per Non-GLP Format
- Automatic Programmable Melting Point Apparatus Model: μ ThermoCal50 with Manual Boiling Point, Block Technology, Resolution: 0.1°C, Temp.: 350°C & Printing Facility as per GLP Format
- Automatic Programmable Melting Point Apparatus Model: μ ThermoCal100 with Manual Boiling Point, Block Technology, Resolution: 0.1°C, Temp.: 400°C, Printing Facility as per GLP Format & 21 CFR Part-11 Compliance

Product Range

- pH/mV/°C/ORP Analyzer • Conductivity/TDS/Resistivity/Salinity/°C Analyzer
- Multiparameter Analyzer (pH/ORP/Conductivity/TDS/Resistivity/Salinity/°C)
- Karl Fischer Titrator • Auto Titrator • Automatic Melting Point Apparatus
- Flame Photometer • Friability Test Apparatus • Tablet Dis-integration Test Apparatus
- Tap Density Test Apparatus • Tablet Hardness Tester • Leak Test Apparatus
- Tablet Dissolution Test Apparatus • Electromagnetic Sieve Shaker • Ultrasonic Bath (Sonicator) • Analytical Electronics Balance • Halogen Based Moisture Analyzer
- Visible & UV-Vis. Spectrophotometer • Nitrogen Gas Generator • Zero Air Gas Generator • Combination Nitrogen / Zero Air Gas Generator • Air Drying Unit for TOC Analyzer • Dew Point Apparatus • Gas Handling & Purification System • Laboratory Furniture & Fume Hood • Exhaust Hood for AAS/ICP.

ANALAB SCIENTIFIC INSTRUMENTS PVT. LTD.

AN ISO 9001 : 2015 CERTIFIED CO.
 CIN: U33110GJ2005PTC046555

Plot No. 361, Sayajimarket,
 N. H. No. 8 By-Pass,
 At & Post : Sayajipura,
 Vadodara - 390019, Gujarat, India.

+91 265 2514404, 9714503393

info@analab.co.in

www.analab.co.in, www.analabscientific.com



Specification & design are subject to change without prior notice for our continuous development.