

AUTOMATIC PETROLEUM WAX MELTING POINT APPARATUS (COOLING CURVE METHOD)



Automatic Petroleum Wax Melting Point Apparatus (Cooling Curve Method) TT-87Z

Automatic Petroleum Wax Melting Point Apparatus (Cooling Curve Method) TT-87Z conforms to ASTM D87, the Standard Test Method for Melting Point of Petroleum Wax (Cooling Curve).

Automatic Petroleum Wax Melting Point Apparatus (Cooling Curve Method) TT-87Z determines the melting point of petroleum wax using the cooling curve method. It is not suitable for waxes in the petrolatum group, microcrystalline waxes, or blends of these waxes with paraffin or scale wax.

APPLICATIONS

The Torontech TT-87Z is used to automatically determine the melting point of petroleum wax via the cooling curve method, in strict accordance with ASTM D87. This test provides a definitive measure of a wax's thermal behavior, a fundamental physical property that dictates its performance, consistency, and suitability for its intended application.

This critical quality control measurement is essential for process control and product integrity in:

- **Packaging Industry:** To verify the properties of waxes used for coating corrugated boxes, paper, and food wrappers, ensuring the coating provides the required moisture barrier and does not melt or transfer during shipping and storage.
- **Candle Manufacturing:** As a primary quality control parameter to ensure lot-to-lot consistency, which directly impacts the candle's structural integrity, burn rate, and aesthetic quality.
- **Cosmetics & Pharmaceuticals:** For formulating products like creams, lipsticks, and ointments, where the wax melting point is critical for achieving the desired product consistency, thermal stability, and application feel.
- **Adhesives & Coatings:** To control the performance of hot-melt adhesives and various industrial coatings, as the melting point is a key factor in determining application temperature, set time, and final bond strength.

FEATURES

- Features a refrigeration system capable of processing 3 samples simultaneously.
- One-key automatic detection function effectively reduces human error.
- Precise PID temperature control.
- Records and plays back the experiment process, ensuring no details are missed.
- Fully compliant with national standards and ISO methods for determining oil melting points.

TECHNICAL SPECIFICATIONS

1. Temperature display range: 0-100°C
2. Temperature control range: (RT -20) to 100°C
3. Temperature resolution: 0.1°C
4. Heating gradient: 0.1°C to 10°C per minute
5. Cooling rate: Semiconductor cooling
6. Temperature accuracy: $\pm 0.2^{\circ}\text{C}$ (below 100°C)
7. Repeatability: Melting point repeatability is $\pm 0.1^{\circ}\text{C}$ at 0.1°C per minute
8. Detection method: Fully automatic (also compatible with manual)
9. Video function: Photo and video capabilities
10. Data preservation capacity: 1000 entries

11. Storage: 32GB
12. Display method: TFT high-definition true color screen
13. Computer interface: USB, RS232, network port
14. Compatible capillaries:
 - OD: 1.3mm, ID: 1.1mm, Length: 100mm (single and double opening)
 - OD: 4.0mm, ID: 3.8mm, Length: 800mm (large capillary)
15. Processing capacity: 3 samples per batch
16. Number of user profiles: 200
17. Video playback: Yes
18. User management: Yes
19. Power supply: AC 220V, 50/60Hz, 120W (110V also available)
20. Instrument size: 400 x 280 x 330mm
21. Weight: 4.1kg



Torontech Inc.

251 Consumers Road, Suite 1200
Toronto, Ontario, M2J 4R3, Canada 

Phone: +1 416 368 2721 | Fax: +1 416 981 7652
Email: info@torontech.com

Torontech, LLC

601 Brickell Key Drive, Suite 700
Miami, FL 33131, USA 

Toll-Free: 1-866-383-7919
Email: sales@torontech.com

Torontech ME FZE

Meydan Grandstand, 6th Floor,
Meydan Road, Nad Al Sheba,
Dubai-261440, UAE 

Phone: +971 488 19252
Email: me@torontech.com

