



Biomedical Systems

FreezePoint®
Freezing Point Osmometer
15µL Sample Size



THE PERFECT LABORATORY COMPANION TO DETERMINE OSMOTIC STRENGTH

A non-invasive in vitro diagnostic product used to determine the osmolality of aqueous solutions.

ADVANTAGES OF THE FREEZEPOINT®

- Controlled easily via touch screen display
- Step by step user guidance through all measurement functions
- Two, or three-point calibration
- Robust design makes it easy to handle and maintain
- Automatic calibration using ELITechGroup's calibration standards
- Last result remains available after switching to automatic stand-by mode
- QM assistance for the laboratory supervisor
- USB or RS232 connections for data transfer to a PCs
- On-board printer to output results (Model 6000P)

DESIGNED FOR

FreezePoint is designed for routine measurements in the medical field and is also suitable for measurements in research and other industries to determine the total osmolality of aqueous solutions.

The instrument only requires 15µL sample volumes, offering rapid measurement cycles.

MEASUREMENT TECHNIQUE

The total osmolality of aqueous solutions is determined by comparative measurements of the freezing points of pure water and of solutions. Whereas water has a freezing point of 0°C, a solution with saline concentration of 1 Osmol/kg has a freezing point of -1.858°C.

SPECIFICATIONS

Model	6000 / 6000P
Display	5.7" LCD - Touch Screen
Weight	6.5 kg (14.3 lbs.)
Dimensions (W x H x D)	205 mm x 360 mm x 220 mm (8.1" x 14.2" x 8.7")
Cooling Unit	Two separate peltier cooling systems with heat dissipation by air
Lower Cooling	Electronic temperature regulation, deviation < ±0.1 °C
Sample Volume	15 µL / single sample
Test Time	~ 60 Seconds
Resolution	1 mOsmol/kg H ₂ O
Units	mOsmol/kg H ₂ O
Range	0 to approx. 3000 mOsmol/kg H ₂ O
Precision (within run repeatability)	SD ≤ 4 mOsmol/kg [0-400] mOsmol/kg H ₂ O CV ≤ 1% [400-1500] mOsmol/kg H ₂ O CV ≤ 2% [1500-3000] mOsmol/kg H ₂ O
Linearity	≤ ±4 mOsmol/kg [0-400] mOsmol/kg H ₂ O ≤ ±1% [400-1000] mOsmol/kg H ₂ O ≤ ±1.5% [1000-2000] mOsmol/kg H ₂ O
Ambient Temperature	10 °C to 30 °C
Power Supply	100 - 240V, 50/60 Hz, 80 VA

APPLICATIONS

- ▶ General medicine
- ▶ Sports laboratories
- ▶ Forensic medicine
- ▶ Electron microscopy
- ▶ Physiology
- ▶ Clinical laboratories
- ▶ Botany
- ▶ Pediatrics
- ▶ Gynecology
- ▶ Military hospitals
- ▶ In vitro fertilization
- ▶ Urology
- ▶ Nephrology
- ▶ Hemodialysis
- ▶ Veterinary medicine
- ▶ Intensive care laboratories
- ▶ Pharmacy
- ▶ Dispensaries
- ▶ Contact lens Manufacturing
- ▶ Food/beverage manufacturing

VQC PROGRAM

- Online, real-time quality control evaluation and comparison program
- Assists with evaluating the performance of your osmometer by comparing your QC results to those of other laboratories worldwide using the same instrument and lot of controls
- Monthly reports assist with routine record-keeping
- Participation in a peer group comparison program fulfills good lab practice guidelines
- Provided at no additional charge

ORDERING INFORMATION

Model 6000	FreezePoint Freezing Point Osmometer (15µL)
Model 6000P	FreezePoint Freezing Point Osmometer (15µL with printer)
SS-036	Pipettor Tips (1000 ea)
SS-275	Measurement Vessels, 1000 ea., FreezePoint
SS-279	Measurement Vessels, 100 ea., FreezePoint
SS-283	Calibration Standard, 100 mOsmol/kg, FreezePoint
SS-284	Calibration Standard, 290 mOsmol/kg, FreezePoint
SS-276	Calibration Standard, 300 mOsmol/kg, FreezePoint
SS-285	Calibration Standard, 500 mOsmol/kg, FreezePoint
SS-277	Calibration Standard, 850 mOsmol/kg, FreezePoint
SS-286	Calibration Standard, 2000 mOsmol/kg, FreezePoint
SS-281	Printer Paper, 8 rolls ea.
AC-199	Pipette, 15 µL
AC-192	Barcode Reader Kit
RP-548	USB Cable, FreezePoint
RP-549	RS232 Cable, FreezePoint
RP-550	Power Cord, US 120V, FreezePoint



WORLDWIDE OFFICES

Please contact your sales representative for terms, conditions and product availability in your country.

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