CRYOLINE™ CRYOSCOPE SUPPLIES



Achieve the most accurate results with comprehensive CryoLine standards and laboratory supplies — designed specifically for use with freezing point cryoscopes.

Proper instrument operation and warranty protection are dependent upon the use of Advanced Instruments supplies, parts, and accessories. Our products are superior to cheaper supplies and will ensure the high measurement accuracy that you expect from our instruments.

Avoid expensive workflow disruptions and ensure reliability of sample results, while meeting or exceeding regulatory guidelines.

- Reliable, traceable materials for use with milk and dairy products, offering stable results
- Specifically designed to satisfy ISO, HACCP, and QA/QC requirements
- Assured monitoring and control of milk supply process and product integrity, from farm to finished product



Quality control managers, laboratory managers, and purchasing professionals specify highperformance cryoscopes to measure the freezing point of milk. However, using generic or offbrand consumables with those cryoscopes will jeopardize precision.

To be sure that your raw milk supply, in-process, and finished products are of the highest quality, you must be confident that your equipment is working properly and providing accurate results.

Use prepackaged, ready-to-use, NIST-traceable CryoLine calibrators and reference solution plus sample tubes and heat transfer fluid from Advanced Instruments to quickly and confidently determine whether added water has come from your producers, haulers, silos, or plant. You can avoid overpaying for lower-grade milk while ensuring uninterrupted workflow and productivity —without expensive delays or service calls.

Developed with knowledge gained from over 50 years of leadership and innovation, CryoLine consumables are designed specifically for your cryoscope. Only these quality products can ensure that your instrument will perform optimally.











Available from:

CryoLine™ Products

422 Milk Cryoscope Calibration Standard — Part No. 3LA023 (-408 m°C) 621 Milk Cryoscope Calibration Standard — Part No. 3LA033 (-600 m°C)

Advanced Instruments cryoscopes rely on calibration with CryoLine standards consisting of stable sodium chloride solutions of known freezing points; these points bracket those of expected unknowns — including milk samples from cows, sheep, goats, and buffalo.

Formulated per published standards, CryoLine standards are traceable to the U.S. National Institute of Standards and Technology, or NIST. Single-use ampules are provided to ensure stability.

Lactrol® 530 Reference Solution — Part No. 3LA030 (-512 m°C)

This liquid-stable, ready-to-use reference material has an extended shelf life of 36 months without refrigeration. Use it to check for instrument drift before each shift, to monitor operators' techniques, to bracket unknown sample runs, and to verify and diagnose erratic results.

Glass Sample Tubes — Part No. 3LA823

Tube heat transfer properties are critical. Poor dimensional control, improper material properties, or variations in quality degrade cryoscope measurement accuracy. Example: if glass tube quality is not tightly controlled, variability can lead to poor repeatability and reproducibility.

CryoLine tube materials, manufacturing processes, and quality control protocols ensure critical lot-to-lot consistency. Inspection confirms that tubes meet ISO5764/IDF 108:2002 freezing point determination specifications.

Heat Transfer Fluid — Part No. 3DA811

CryoLine cooling fluid efficiently conveys thermal energy from the test sample to the cryoscope cooling system. Users can be confident that the freezing point process (supercooling/nucleation /plateau) occurs with absolute accuracy.

Hot-Line® Technical Service

Advanced Instruments' Hot-Line Service and worldwide dealer network provides comprehensive customer service and technical support.

In the United States and Canada, call (800) 225-4034, Monday through Friday, 8:00am to 4:30pm (EST). For more information on the Advanced Instruments family of products, please call +1 (781) 320-9000 or email us at *info@aicompanies.com*.

The management system governing the manufacturing of this product is ISO 9001:2000 and ISO 13485:2003 certified.

Advanced Instruments, Inc., an industry leader for more than fifty years, designs and implements automated systems that help our global customers improve productivity and product quality, meet regulatory requirements; and reduce operating expense. Advanced Instruments and its subsidiaries, Spiral Biotech and Delta Instruments, engineer turnkey systems to monitor raw and finished product quality.



Two Technology Way / 781-320-9000 Norwood, Massachusetts 02062, USA 800-225-4034 Fax: 781-320-8181 www.aicompanies.com