THE FLUOROPHOS® ALP
TEST SYSTEM

The most sensitive pasteurization determination.

ADVANCED INSTRUMENTS

Taking phosphatase testing to its highest level.

The Fluorophos® ALP Test System takes phosphatase testing to its highest level by yielding quantitative results and eliminating subjective interpretation.

A versatile system for dairy products, the Fluorophos ALP Test System can test products made from cow, goat, sheep, and other species.

Raw milk can contain microorganisms that can pose serious health risks to individuals. The raw, unpasteurized milk can carry dangerous bacteria such as salmonella, E. coli, and listeria. Pasteurization of milk was adopted by the food industry as a basic safety measure to kill the harmful bacteria by heating the milk to a specific temperature for a set period of time. Milk processing plants depend on pasteurization tests to check on the quality and safety of the product. If a pasteurization failure occurs, milk of dubious quality and safety would be released with potentially disastrous public relations and financial consequences for the processor.

The Fluorophos ALP Test System is a rapid test for verifying proper pasteurization of dairy products. Alkaline phosphatase (ALP), found naturally in raw milk, is destroyed at temperatures slightly above the temperature necessary to destroy microorganisms pathogenic to mankind. Measurement of residual phosphatase after pasteurization offers a means of verifying the products are heated to the proper temperatures and are not contaminated with raw milk. The Fluorophos ALP test system measures the ALP activity in dairy products, allowing the user to monitor completeness of pasteurization and detect raw milk contamination.

The quantitative Fluorophos ALP Test System permits the continuous and direct measurement of the released reaction product from a fluorogenic substrate. The use of this fluorometric method eliminates the interferences and non-specificity encountered in colorimetric assays, and avoids the need for dialysis, butanol extraction, or protein precipitation, which are hazardous, tedious, and time-consuming.

ALP results below the required 350 mU/L level provide information to the vendor, and most importantly, to legislators showing that the milk is correctly pasteurized and has not been contaminated with raw milk.

The Fluorophos® ALP Test System, determining safe alkaline phosphatase levels with speed and accuracy.

The Fluorophos ALP Test System is the industry standard and is extensively used by regulatory authorities. ALP testing provides an invaluable end-product test.

The EU requires that any other method considered for use be validated against the fluorimetric method and has lowered the statutory level for ALP in pasteurized milk from 500 to 350 mU/L.

With the Fluorophos ALP Test System, you can closely monitor your production processes and anticipate quality control problems. The test can detect pinholes and cracked seals in your high-temperature short-time (HTST) system before they trigger pasteurization failures and workflow interruptions.

The fastest and most sensitive test for confirming pasteurization.

Greatest sensitivity.

The Fluorophos ALP Test detects as little as 0.003% raw milk contamination, making it many times more sensitive than any other method. Our Fluorometer actually exceeds the FDA and EU ALP detection criteria.

Highest specificity.

The high level specificity of the Flurophos ALP test elimninates false positives, and color or fat content variations in cheese and flavored products will not affect test results.

Eliminate uncertainty.

Globally proven.
Laboratories around the world are using the Fluorophos ALP Test in conjunction with a Hazard Analysis and Critical Control Point (HACCP) program. The Fluorophos ALP Test is the standard ISO/IDF method and was reviewed and approved by NCIMS/FDA. It is also approved by AOAC, IMS, and CEN European standards for confirming proper pasteurization.

Fast and accurate results.
Test results automatically appear in approximately 3 minutes on the digital display. With one system you can test both cheese and other dairy products made from fluid milk.

Reduced production liability.
Because the Fluorophos ALP Test detects ultra low levels of raw milk contamination, it offers unmatched protection against the threat of pathogens in pasteurized milk.

Since 2007, Fluorophos ALP Test System is the official reference method for ALP testing in the EU-published standards ISO 11816-1/IDF 155-1 for milk products and ISO 11816-2/IDF 155-2 for cheese products.

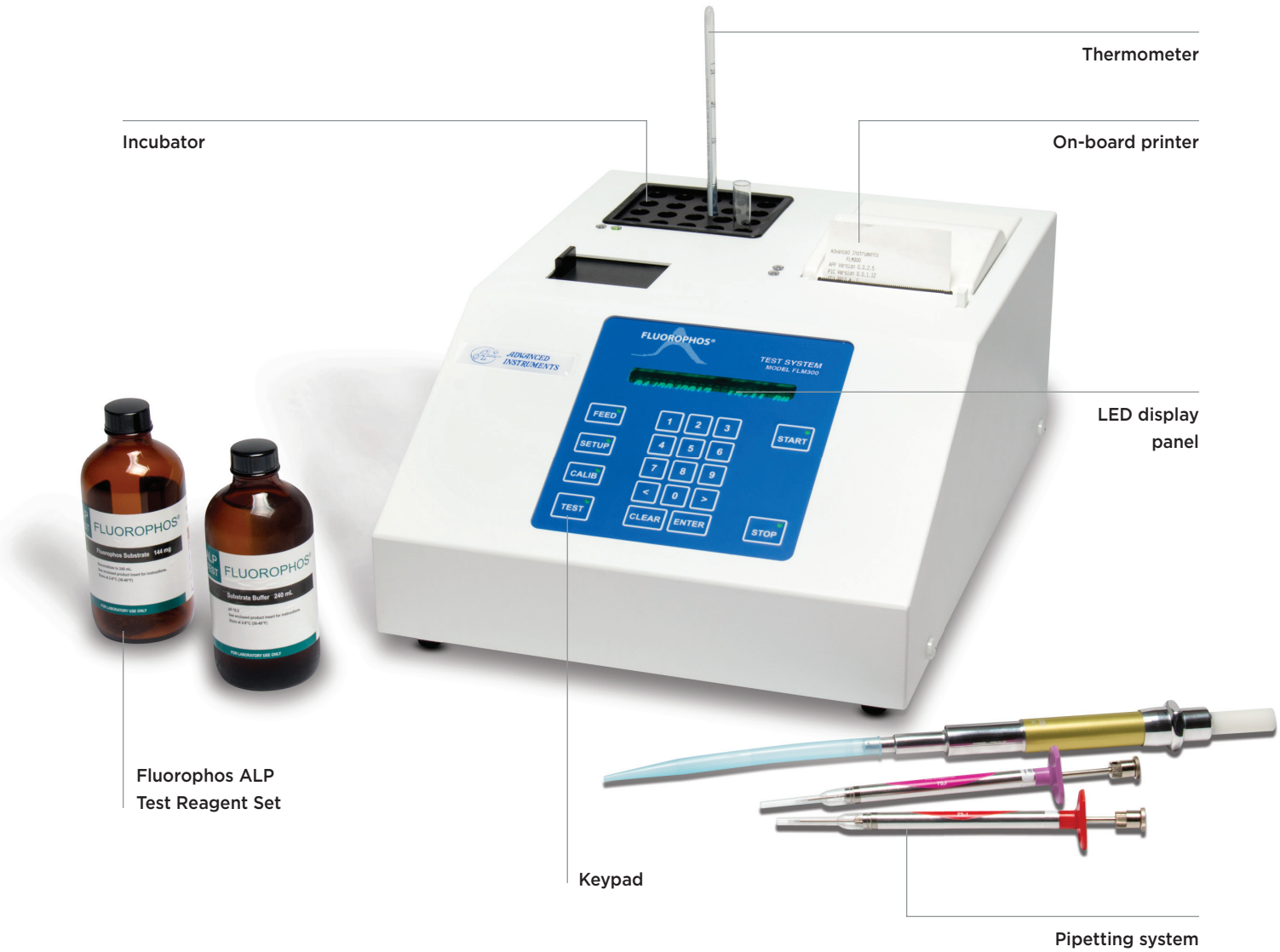
PhosphaCheck Pasteurization Controls.

PhosphaCheck Pasteurization Controls are easier and more reliable.

PhosphaCheck Pasteurization Controls allow you to monitor your assay. These consistent, reliable, off-the-shelf controls readily replace in-house manufactured controls. With this set of positive, negative, and normal PhosphaCheck Controls, you are assured quantitative levels of ALP—every time.

- Reliable controls for milk and dairy products offering quantitative levels of alkaline phosphatase (ALP)
- Specifically designed to satisfy all QC and HACCP requirements
- Monitor the precision of your lab pasteurization test
- Designed for use with NCIMS Form 2400j-1
- Use to meet local regulatory procedural requirements

Greatest sensitivity.



Easy and reliable.

The Fluorophos ALP Test System specifications

Electrical
Power requirement 100–240 VAC (50–60 Hz)
Fuses (2) 250V time delay (Type T): 1 Amp
Power consumption 180 W
Memory backup Integral lithium cell; 10-year life (typical); not user-replaceable

Sample test volume See test kit instructions

Aspirated sample volume 150 µL

Sample capacity Single sample

Readout 20-character vacuum fluorescent display

Units FLU (fluorescence unit)

Results units See test kit instructions

Zeroing Automatic

Resolution 1 FLU

Drift Less than 3 FLU per hour

Cuvette size 12 x 75 mm round

Warm up time
Cuvette chamber 15 minutes
Heating block 30 minutes

Test time 3 minutes

Optics 90° optical bench with light source, fixed filters, detector

Light source Light emitting diode

Filters
Excitation 440 nm bandpass
Emission 550 nm longpass

Storage temperature 32 to 158° F/0 to 70° C

Operating temperature 68 to 85° F/20 to 29° C

Room humidity 5–80% relative humidity (non-condensing)

Sound level 71.5 dB(A) maximum at operator's position

Communications
- Integrated thermal printer
- DTE EIA-232/V.24(RS-232) serial port (baud selectable: 1200, 2400, 4800, 9600 or 19200)
- Optional barcode reader

Dimensions (W x H x D) 6.5" x 12.5" x 16.5" (17 cm x 32 cm x 42 cm)

Net weight 18 lbs. (8 kg)

Shipping weight 34 lbs. (15 kg)

IEC protection class I

Over-voltage category II

Pollution degree 2

Moisture protection IPX0 (ordinary)

CE Intertek RoHS

The quality management system governing the manufacturing of this product is ISO 9001 and ISO 13485 registered.

ADVANCED INSTRUMENTS

Advanced Instruments products are available from a worldwide distributor network. For more information on our products and services or to find your nearest distributor, visit us at aicompanies.com or e-mail us at info@aicompanies.com.

Hot-Line™ Technical Service Advanced Instruments provides 24/7 comprehensive customer service and technical support.

©2017 Advanced Instruments. Hot-Line, Advanced, Fluorophos, PhosphaCheck Pasteurization Controls, PhosphaCheck-N Normal Pasteurization Control, PhosphaCheck Negative Pasteurization Control and PhosphaCheck Positive Pasteurization Control are trademarks of Advanced Instruments. All other trademarks are the property of their respective companies.

PCN00252 MP21051 rev0