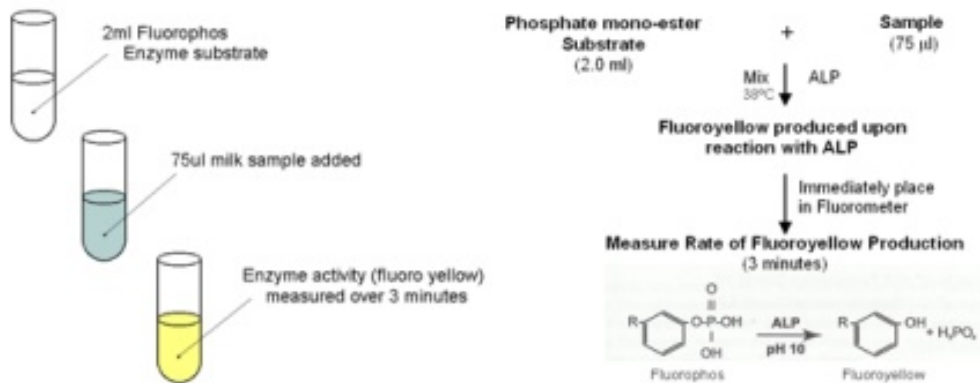


Fluorophos ALP Test Procedure

The Fluorophos ALP (Alkaline Phosphatase) test is used as an indicator of correct pasteurisation and the presumed safety of milk and dairy products.

- ALP is DEACTIVATED at ~63°C. Pathogens are destroyed at ~60°C
- ALP activity decreased → temperature/time condition to kill pathogens has been reached
- ALP activity in RAW MILK ~ 400,000 mU/l → ALP activity in pasteurised milk 10-40 mU/l



The Fluorophos principle of measuring for residual ALP in pasteurised dairy products is by adding the test sample to a non fluorescent substrate. Any ALP present produces a FLUORESCENT compound and measuring this change in fluorescence is directly proportional to the concentration of ALP in the sample.

Substrate Preparation

When the Fluorophos is switched on allow 2 hours before use to ensure complete electronic stabilization.

1/ Pour the entire contents of one of the substrate buffer bottle into one of the powdered Fluorophos substrate bottle.

2/ Mix by gentle inversion for 3 minutes, to dissolve all of the substrate. Allow to stand for 15 minutes.

3/ Note date of mixing on bottle. The shelf life will be 60 days, stored at 2 – 6°C. To check the substrate warm 2 ml and place in Fluorophos. Run A/D Test (In Setup). Stabilized result should be less than 1200 (If over, replace substrate). If degrading quickly, contact QCL for advice.

Test Procedure

1/ Dispense 2ml of prepared Fluorophos substrate into a sufficient number of cuvettes for the proposed tests.

2/ Place substrate cuvettes in the block heater for a minimum of 10 minutes.

3/ Select product to be tested from the Fluorophos menu. Press TEST, ENTER, pick channel, ENTER, enter ID number if necessary, ENTER.

4/ Press 'TEST' and select the 'ALP Dairy' menu.

5/ Scroll through the menu and press 'Enter' when the product to be tested is displayed.

6/ Pipette 75ul of the milk/cream sample, into a pre-warmed substrate cuvette (see Pipetting Guide for more details).

7/ Mix immediately then insert the cuvette in the Fluorophos, within 20 seconds, and press 'START' to measure the sample.

8/ The sample is conditioned/heated for 60 seconds.

9/ After a further 2 minutes the result is presented in mU/L.

Example Daily QC Sheet

Date:			
QC Test	Expected Result	Actual Result	Pass/Fail
A/D 302 blank	302 +/- 4	305	Pass
A/D 602 Daily Control	602 +/- 12	608	Pass
A/D Substrate	<1200	897	Pass
Daily Positive Control	Approx 500 mU/l	672 mU/l	Pass

Example Test Sheet

Date:				
Sample ID No	Result mU/l		Sample ID No.	Result mU/l
432423	<10			
453211	24			
564322	21			
442222	<10			