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A. Introduction

The **PortaSCC**[®] milk test is designed as an on-farm management tool.

It provides you with an effective way of screening for subclinical mastitis when you need quick results.

B. Applications

When do I use this test?

This test has many uses:

- Monitoring *hot cows*
- Checking at *Freshening & Dry Off*
- Monitoring sick cows *after treatment*
- Monthly herd *screening*
- Bulk tanks

What if I already use a monthly screening program, such as DHI?

The test works well in conjunction with monthly screenings (DHI or other), allowing you to monitor a *hot list* or to test *fresh* and *treated* cows between screenings.

C. Test Principle & Relation to Other Methods

How does the **PortaSCC**[®] milk test work?

The test is based on a reaction between a cell-surface enzyme present in the milk and a color producing chemical in the test strip. The higher the cell count of the sample, the higher the amount of enzyme and the darker the blue color that appears on the test strip.

How does the **PortaSCC**[®] milk test differ from the CMT?

The **PortaSCC**[®] milk test provides numerical readings for SCC and can be used with composite and bulk tank samples.

How does the **PortaSCC**[®] milk test differ from reference lab testing?

The lab instruments use a technique called *flow cytometry* to measure the SCC. As the sample flows through a tube, the instrument counts the number of cells it sees.

How does the **PortaSCC**[®] milk test compare to lab data?

In the lab and in field studies by major universities, the **PortaSCC**[®] milk test shows good correlation with lab data.

D. Conditions for Running the Test

What if the temperature is very cold when I test the samples?	We recommend testing the milk samples at a place that is warmer than 45° F (7° C). Very cold temperatures will yield falsely low readings.
What if the temperature and humidity are very high when I test the samples?	We recommend testing the milk samples at a place that is cooler than 95° F (35° C) and with humidity less than 80%. High temperature plus humidity can yield falsely high readings.
Can I dip the test strip in milk or strip milk directly onto the test strip to run the test?	No, a specific volume of sample is needed for the test to be accurate.

E. Milk Samples

How fresh must the milk be?	The milk should be tested within 8 hours of sampling. Bulk tank samples should not contain any milk that is more than 8 hours old.
Will the temperature of the milk affect the test?	No, the temperature of the milk should not affect the result.
Should I mix the milk sample before testing?	Yes, it is recommended that the milk sample be mixed before testing.
What happens if I add more than one drop of milk?	Your result may be too high. It is best if you redo the test.
Can samples with preservative be tested?	No, the preservative interferes with the test.
Can samples with antibiotic be tested?	Yes, antibiotics will not interfere with the test.
What if the milk is not absorbed into the Sample Well?	The test will not give an accurate reading when samples are not absorbed into the Sample Well.
Can I use the PortaSCC [®] milk test to assay dairy goat and sheep samples?	PortaCheck has not yet conducted field studies for these applications.

F. Activator Solution

What if I add milk, but do not immediately add Activator Solution?	You should try to add Activator Solution within 2 minutes of adding the sample to the test strip. Otherwise, repeat the test with a new strip.
How long can the Activator Solution be kept and still be used?	If stored in the recommended temperature range, the Activator Solution can be used through the <i>Best if used by</i> date printed on the back of the kit.
Will the test still work if I accidentally put in 4 drops of Activator Solution instead of 3?	Yes, but you should try to avoid that because results may be slightly higher.

Should Activator Solution stay out of the sun?	Yes.
Will the Activator Solution freeze? If so, what should I do?	Yes, the Activator Solution can freeze. If that happens, simply defrost the Activator Solution completely and continue to use.

G. Pipettes

Can I use a pipette or dropper, other than the one provided, to run the test?	No, use only one of the pipettes provided by the manufacturer. They will form the size milk drop necessary to run the test.
How do I reuse the pipette?	After each sample, squirt any milk remaining in the pipette into a waste container. Then insert the pipette tip into the next sample. Squeeze and release the bulb 3 or 4 times before drawing the next sample into the pipette.
How do I store a pipette after I've used it? Do I need to clean it off? If so, how?	Rinse pipette with clean water by squeezing and releasing the bulb at least 5 times before storage.
How large is one drop of milk from the pipette?	35–40 microliters.
What if the pipette tip touches the Sample Well when I dispense the milk?	You may get less than a full drop of milk on the test strip. This will result in a low reading.
How do I get a full drop of milk onto the Sample Well?	Hold the pipette tip approximately ¼ inch above the Sample Well and gently squeeze the bulb; allow a full, hanging drop to fall into the Sample Well (See the Product Directions for photo).

H. Blanking Strips

How many times can I use the Blanking Strip?	A single Blanking Strip can continue to be used as long as it is kept clean & dry and the thick paper is not frayed. Store the Blanking Strip in its bag when not in use.
Do I have to add Activator Solution to the Blanking Strip when I set (blank) the Digital Reader?	No, use a dry Blanking Strip to set (blank) the Digital Reader.

I. Test Strips

How long can I use test strips after opening the pouch?	We recommend using the strips in the 2-strip pouch within 4 hours after opening. If you have a 50-strip bag, reseal the bag and use the strips within 5-7 days.
Where are the lot numbers and Best if used by date for the kit?	The lot number and Best if used by date are printed on the label on the back of the kit box.
What if the test strip is dropped/disturbed during color development?	If the test strip does not pick up dirt or water, it should be fine.

What if dirt gets into the Sample Well? Can we blow it off?

No, avoid any visible dirt settling on the Sample Well.

What if the test strip was exposed to direct sunlight or high humidity? What if I left the pouch in the sun or inside a hot vehicle?

Make sure the Sample Well is not dark pink, and use the test strip as soon as possible.

What if the Sample Well appears pink when removed from the pouch?


A light pink color will not affect the accuracy of the digital read. If the color is dark pink, please call your dealer/distributor or call **PortaCheck** at 866.500.7722 (toll free US) or 856.231.8894 (toll).


J. Digital Reader

Is there a warranty on the Digital Reader?

The warranty on the Digital Reader is 90 days after the date of purchase. Please call **PortaCheck** for return authorization.

What happens if I push the up or down arrow button of the Digital Reader?

Pressing the **up arrow**  will allow you to view previous readings that are automatically stored in the Digital Reader's memory. Once the reader is in memory mode, it must be shut off and restarted in order to read more test strips.

Do not press/use the **down arrow**  because this will change the calibration of the reader.

How do I know if the battery is low?

A discharged battery symbol will appear on the screen.

What type of battery does the Digital Reader use? Where can I get it?

The Digital Reader uses a 3V CR2032 lithium battery. It is a common battery and can be found in most drug stores, supermarkets, or consumer electronics stores.

How often do I have to clean the Digital Reader? How do I clean the Digital Reader?

You should not have to clean the Digital Reader often. If milk or dirt get deposited onto the reader in the Sample area, remove the black reader cover and clean the optical window with a cotton swab soaked with warm water. Let the Digital Reader air-dry before putting the cover back on.

What if I drop the Digital Reader?

Inspect for any physical cracks. Turn on the Digital Reader. If the message 543 still comes on, the Digital Reader is fine.

K. Reading the Results

Can I tell if a sample has a very high count in less than 5 minutes if I just want a yes/no answer?

Yes, a sample with a very high SCC count will turn the Sample Well blue within 5 minutes if all you want is a yes/no answer.

What if the Digital Reader gives an E-2 reading?

If the Digital Reader gives an E-2 reading, the strip was removed before a reading could be taken. Shut the Digital Reader off, turn back on, blank the Digital Reader, and reinsert the Test Strip.

What does it mean when the Digital Reader displays either "LO" or "HI"?

Some versions of the Digital Reader use "LO" to indicate that the sample is under 50,000 cells/mL.

"HI" indicates the sample is over 3 million cells/mL.

Why do I keep getting zero (0.00) or "LO" readings for my bulk tank measurements?

You may have: 1) used a sample that was more than 8 hours old, 2) not inserted the test strip all the way into the reader, 3) added Activator Solution to the Blanking Strip, or 4) not deposited a full drop of milk into the Sample Well.

What if the result is zero (0.00) or "LO", but the strip looks blue?

Shut the Digital Reader off, turn back on, blank the Digital Reader, and reinsert the Test Strip taking care to make sure the strip is face down and inserted all the way. If the result is still zero or "LO", contact your dealer/distributor or **PortaCheck**.

L. Other

What if my question is not here or I need additional information?

Please check our Web site or contact us using our toll-free number (US only, for other areas please use 856.231.8894).