



Soleris® vial uninoculated (left) and inoculated vial (right).

The Coliform Vial, 9 mL (CC-109) is a screening vial specific for coliform organisms. The vial has broad inclusivity and an assay time of 14–18 hours for most applications. The vial contains a peptone yeast extract base with lactose as a carbon source. The selective agents include bile salts, sodium lauryl sulfate and other gram-positive inhibitors. Acidification of the medium due to the lactose utilization changes the pH. As coliforms metabolize, the pH indicator changes from a purple to a yellow color. The color change is read by optical sensors in the instrument.

Materials Required:

1. CC-109, Coliform vial, 9.0 mL

Dependent on Sample Tested:

1. Sterile 1 N to 5 N sodium hydroxide (NaOH) and/or hydrochloric acid (HCl)
2. pH meter or pH paper
3. Butterfield's Phosphate Buffer, 99 mL (BPB-99)
4. For USP Testing: Tryptic Soy broth, 90 mL (BLX-TSB90) or Butterfield's Phosphate Buffer, 90 mL (6654)
 - a. If required, use a designated neutralization broth, such as D/E Neutralizer, TAT Broth, Modified Letheen Broth, etc.

Only for Confirmation

5. Brilliant Green Bile Broth tubes

Vial Specifications

1. Vial pH is 6.7 ± 0.2
2. Vial sample capacity up to 1.0 mL

Sample Preparation

1. Add sample directly or if using dilute-to-specification, complete the dilution required (See Soleris® Manual, section 1.7).
 - a. For USP testing, perform 1:10 dilution by adding 10 g of sample in 90 mL of Tryptic Soy Broth or designated neutralization broth.
 - i. Check pH and adjust, if necessary, to 7.0 ± 1.0
 - b. For all other testing, perform 1:10 dilution by adding 11 g of sample in 99 mL of Butterfield's Phosphate Buffer
 - i. Check pH and adjust, if necessary, to 7.0 ± 1.0

2. If necessary, use Butterfield's Phosphate Buffer to create the dilutions to the appropriate specification.

Inoculation of Vial

1. Inoculate the vial with up to 1.0 mL and no less than 0.10 mL of the sample to be tested. If using specification monitoring, add the volume of the appropriate dilution required.
2. Cap the vial and gently invert 3 times to mix sample. Keep cap tight.
3. Insert the vial into the Soleris instrument set at 35°C and run for the pre-programmed test duration. It is not recommended to adjust the parameters without consulting Neogen Technical Services.

Incubation Temperatures

35°C or as indicated by trainer

Algorithm Utilized:

Test	Threshold	Skip	Shuteye	Duration	Temperature
CC-109	10	1	25	14–18 hours	35°C

Coliform Confirmation Step (Optional):

Material required

1. Brilliant Green Bile Broth

Test Method

1. From a positive CC-109 vial, invert to mix and inoculate 0.1 mL of the broth medium into a Brilliant Green Bile Broth tube with the inverted Durham tube.
2. Incubate for 18–24 hours at 35°C. Gas production inside the Durham tube and yellow color due to the acid production indicates a positive result.



Disclaimers:

Information provided is based on validation procedures that Neogen performed in Neogen laboratories. Deviation from procedures is possible, but should be discussed with Neogen Technical Services.

Samples may need to be pH adjusted for all vials.

Appearance of the vials should be inspected prior to use.

If shuteye detections are observed, the threshold may need to be adjusted based on the product matrix. Certain product matrices may require parameter adjustments, including increased test duration. For more information contact Neogen Technical Services.