soleris®

# *Direct Pseudomonas Burkholderia Cepacia Complex*

***Product Number: PD-109 and S2-BCC-S***


*Pictured: PD-109 vial with S2-BCC-S added uninoculated (left) and inoculated vial (right).*


*Pictured: S2-BCC-S Burkholderia cepacia complex supplement*

## *Introduction*

The *Pseudomonas* vial (PD-109) with the supplement (S2-BCC-S) is specific for detecting *Burkholderia cepacia* complex. The vial has a detection time within 72 hours for most applications. The vial contains a selective medium and the supplement which is added to the vial. As organisms grow in the broth medium, the carbon dioxide ($CO_2$) produced diffuses through a membrane layer into a soft agar plug containing a dye indicator. The membrane layer also serves as a barrier, eliminating product interference with the reading window. The $CO_2$ released during the organism growth changes the agar plug from green/blue-green to yellow. The instrument reads the color change in the dye. The supplement's addition will change the color of the media in the vial from beige to light green.

### Materials Required

1. PD-109 vial
2. Modified Letheen broth (BLX-MLT)
3. S2-BBC-S supplement

### Dependent on Sample Tested

1. Sterile 1N to 5N sodium hydroxide (NaOH) and/or hydrochloric acid (HCl)
2. pH meter or pH paper

### Vial Specifications

1. Vial pH is 7.0 ± 0.2
2. Vial sample capacity: 0.1 mL

### Sample Preparation

1. For USP testing, perform 1:10 dilution by adding 10 g of sample in 90 mL of BLX-MLT or designated neutralization broth.
   a. Check pH and adjust if necessary to 7.0 ± 1.0
2. Incubate for 24–30 hours at 35°C.

## Vial Preparation

1. Remove the PD-109 vials from the refrigerator and allow them to equilibrate to room temperature.

## Inoculation of Vial

1. Transfer 0.2 mL of S2-BCC-S to the PD-109 vial.
2. Cap the vial and gently invert 3 times to mix the sample.
3. Transfer 0.1 mL of the incubated enrichment to the PD-109 vial.
4. Cap the vial and gently. Invert the vial 3 times to mix the sample. Note: Keep the cap tight.
5. Insert the vial into the Soleris® instrument set at 35°C and run for the preprogrammed test duration. It is not recommended to adjust the parameters without consulting NEOGEN® Technical Services.
6. If detection occurs, send samples out for identification.

## Algorithm

| Test | Test Type | Threshold | Skip | Shuteye | Test Duration | Temperature |
|---|---|---|---|---|---|---|
| PD-109 with S2-BCC-S | Yellow | 10 | 1 | 60 | 48–72 hours | 35°C |

## Confirmation Procedure

1. Confirm any positive samples on BCSA.
2. Streak 10 uL loop from vial for isolation onto BCSA plate.
3. Incubate BCSA plate at 30°C to 35°C for 48–72 hours.
4. Any growth on *Burkholderia cepacia* selective agar is confirmed by identification tests according to Microbial Characterization, Identification, and Strain Typing USP <1113>.
5. If the plates do not have typical colonies, the test specimen meets the requirement for the absence of *Burkholderia cepacia* complex.

## Disclaimers

The 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.

The appearance of the vials should be inspected prior to use.

Certain product matrices may require new parameters. For more information, contact NEOGEN Technical Services.

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