soleris®

Direct *Pseudomonas* Vial

Product No. PD-109

Instructions for use in Soleris instrument

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

The Direct *Pseudomonas* Vial (PD-109) is a screening vial for the detection of *Pseudomonas* species. The vial has an assay time of 48 hours for most applications. The vial is a CO_2 vial and contains a selective medium. 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 light green. The color change in the dye is read by the instrument.

Materials Required:

1. PD-109, *Pseudomonas* Vial (PD-109)

Dependent on Sample Tested:

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

For Confirmation Testing:

1. Oxidase Strips (BLX-OX)
2. Glucose Test

Vial Specifications

1. Vial pH is 7.0 ± 0.2
2. Vial sample capacity up to 1.0 mL

Vial Preparation

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

Sample Preparation

1. Add the sample directly or prepare a 1:10 dilution by adding 11 g of sample to 99 mL of sterile Butterfield's Phosphate Buffer, or appropriate neutralizing solution.
2. For USP testing, perform 1:10 dilution by adding 10 g of sample in 90 mL of Tryptic Soy Broth (See Neogen Rapid Microbiology System Validation Book, Introduction, p.5) or designated neutralization broth.
   a. Check pH and adjust if necessary, to 7.0 ± 1.0
3. If using the dilute-to-specification method, complete the dilution required.

Inoculation of Vial

1. Inoculate the vial with no more than 1.0 mL and no less than 0.10 mL of the sample to be tested. If using dilute-to-specification method, 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 25°C and run for the pre-programmed test duration. It is not recommended to adjust the parameters without consulting Neogen Technical Services.
4. If detection occurs, perform the confirmation tests.

Algorithm Utilized:

Test	Threshold	Skip	Shuteye	Duration	Temperature
PD-109	8	2	50	48 hours	25°C

Confirmation Procedure

1. Remove the PD-109 vial positive (detecting) vial from the instrument.
2. Streak one loop of broth onto Tryptic Soy Agar.
3. After incubation at 25°C for 18–48 hours, perform an oxidase and glucose test on an isolated colony.
4. *Pseudomonas* species are oxidase positive and glucose negative.
5. If positive, send out the sample for identification.

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.

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