



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

The Heterotrophic (S2-HETER) Vial is designed to detect aerobic and facultative anaerobic heterotrophic bacteria in water, with a low nutrient requirement. The vial has broad inclusivity and an assay time of 48 hours for most applications. As organisms grow in the broth medium, the carbon dioxide (CO<sub>2</sub>) produced diffuses through a membrane layer into a soft agar plug containing a dye indicator. The color change in the dye is read by the BioLumix® instrument.

The membrane layer also serves as a barrier, eliminating product interference with the reading frame.

### Materials Required:

1. S2-HETER, Heterotrophic vial
2. Butterfield's Phosphate Buffer (BPB-99)

### Vial Specifications

1. Vial pH is 7.2 ± 0.2
2. Vial sample capacity: 0.1 – 1.0 mL

### Vial Preparation

1. Remove S2-HETER 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 ml of sample to 99 mL of sterile Butterfield's Phosphate Buffer.
  - a. Do not use Tryptic Soy Broth to prepare the sample
2. 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 BioLumix instrument set at 35°C or as indicated by trainer. The incubation temperature and test duration can be optimized if required. It is not recommended to adjust parameters without consulting Neogen Technical Services.

### Algorithm Utilized:

Test	Test Type	Detection Level	Resolution	Ignore	Test Duration	Temp
S2-HETER	Yellow	7	3	10	48 Hours	35°C

### 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.

Appearance of the vials should be inspected prior to use.

Certain product matrices may require parameter adjustments, including increased test duration. For more information contact Neogen Technical Services.