



Total Viable Count (TVC)

Product Number: NB-100



Pictured: NB-100 vial uninoculated (left) and inoculated vial (right).

Introduction

The Total Viable Count (TVC) Medium Vial (NB-100) is suitable for testing in a variety of matrices. The detection system for the instrument contains a nutrient-based medium with dextrose as the carbon source. Acidification of the medium due to glucose utilization changes the pH, indicating the total count of fermenting organisms. Bromocresol purple (BCP) is used as the pH indicator. The color change in the dye is read by the Soleris® instrument.

Materials Required

1. NB-100, TVC (NB-100) Vial

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

Vial Specifications

1. Vial pH is 6.7 ± 0.2
2. Vial sample capacity up to 2.0 mL

Sample Preparation

1. Add sample directly, or, if using dilute-to-specification, complete the dilution required.
2. For dilutions perform a 1:10 dilution by adding 11 g of sample in 99 mL of BPB-99.
3. Check pH and adjust if necessary to 7.0 ± 1.0 .

Inoculation of Vial

1. Inoculate the vial with no more than 2.0 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 32–35°C or as indicated by trainer. The incubation temperature and test duration can be optimized within the listed ranges for different product types. It is not recommended to adjust parameters without consulting Neogen® Technical Services.



Algorithm Utilized

Test	Threshold	Skip	Shuteye	Test Duration	Temperature
NB-100	10	1	25	24 hours	32–35°C

*If shuteye detections are observed at 2.8 hours the parameters may need to be adjusted based on product matrix. Please consult Soleris technical services for assistance.

Disclaimers

Information provided is based on validation procedures that Neogen performed in Neogen laboratories, deviation from procedures are possible, but should be discussed with Neogen technical services.

Appearance of the vials should be inspected prior to use.

Certain product matrices may require new parameters. For more information, contact Neogen technical services.

If shuteye detections are observed the threshold may need to be adjusted based on the product matrix. Certain product matrices may require new parameters. For more information, contact Neogen technical services.

Some strains (such as *Bacillus coagulans* ATCC 7050, *Staphylococcus epidermidis* ATCC 12228, and *Staphylococcus haemolyticus* ATCC 29970) do not detect within the recommended test duration and will need a longer detection time. These organisms may have been strain-specific or described as being temperature sensitive.