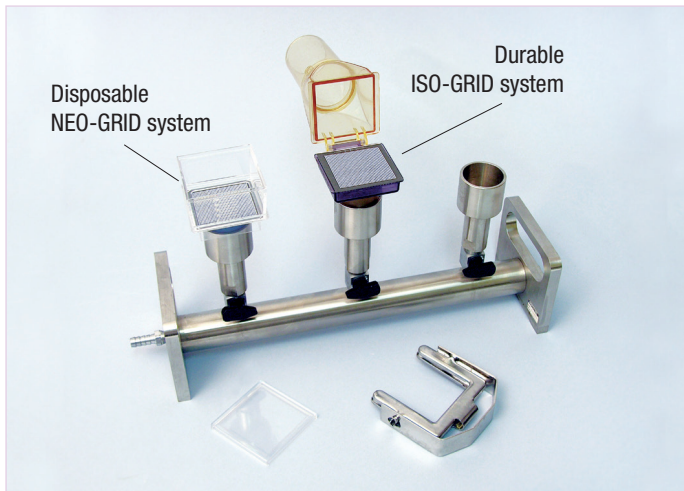


ISO-GRID/NEO-GRID

Membrane Filtration System



Intended Use

NEO-GRID disposable units and ISO-GRID membranes are filtration systems used on food, beverage and water samples for the detection, confirmation and enumeration of microorganisms including yeast and mold, total plate counts, coliforms, generic *E. coli*, *E. coli* O157:H7, *Salmonella*, *Listeria*, *Listeria monocytogenes*, *Staphylococcus* and more.

The Test

The ISO-GRID/NEO-GRID microorganism detection systems are based on the principles of hydrophobic grid membrane filtration (HGMF). The filter units of each system are placed onto a vacuum manifold, the sample is added and vacuum applied. After the membrane has filtered the sample, it is aseptically removed, placed onto the appropriate media and incubated. The microorganisms are contained within the boundaries of the hydrophobic grid lines making the results easy to interpret. 1,600 squares provides a broad counting range and eliminates the need to analyze several dilutions.

Media

- BMA Agar (6903A) – For the confirmation of *E. coli*.
- EF-18 Agar (6901A) – For detecting and confirming *Salmonella*.
- LM-137 Agar (6913A) – For the presumptive enumeration of *Listeria* and *Listeria monocytogenes*.
- LMG Agar (6902A) – For the detection of coliforms.
- SCCRAM Broth (6910A) – For the enrichment of *Salmonella*.
- SD-39 Agar (6907A) – For the enumeration of *E. coli* and *E. coli* O157:H7.
- TSAF Agar (6905A) – Used to determine total bacterial counts.
- YM-11 Agar (6904A) – For the enumeration of yeasts and molds in only 48 hours.

Enzymes

Enzymes are used to digest the food commodities so that they can pass through the 0.45 µm membrane. The following enzymes are available:

- AMG (6852E) – For the digestion of starchy foods.
- APUG (6851E) – For the digestion of proteinaceous foods.
- Cellulase (6853E) – For the digestion of gums.
- Hemicellulase (6854E) – For the digestion of gums.
- Papain (6850E) – For the digestion of proteinaceous foods.

Approvals

ISO-GRID/NEO-GRID Method Approvals

Yeast and Mold Count	AOAC No. 995.21
Total Bacterial Count	AOAC No. 986.32
Total Coliform/ <i>E. coli</i> Count	AOAC No. 990.11
<i>Salmonella</i> Detection	AOAC No. 991.12
<i>E. coli</i> O157:H7 Count	AOAC No. 997.11

Canadian Compendium of Analytical Methods-Health Canada

Enumeration of coliforms in foods by the hydrophobic grid membrane filter method.	MFHPB-17
Enumeration of <i>E. coli</i> in foods by the hydrophobic grid membrane filter method.	MFHPB-26
Enumeration of fecal coliforms in foods by the hydrophobic grid membrane filter method.	MFLP-55
Determination of aerobic colony count in foods by the hydrophobic grid membrane filter method.	MFLP-56
Screening bottled water for the presence of indicator and pathogenic bacteria.	MFLP-60

Canadian Standard Methods for the Examination of Water and Wastewater

Standard total coliform membrane filter procedure	9222B
Fecal coliform membrane filter procedure	9222D

Refer to Methods Manual for complete instruction and other available methods.

Results



Ordering Information

Prod.#	Product description
6848	NEO-GRID Test System – Contains 48 individually packaged membrane filtration systems
6802	Membrane Filters, standard 1600-grid with a pore size of 0.45 µm
6836	Membrane Filters, 36-grid with a pore size of 0.45 µm
6866	NEO-GRID-36 Test System – Contains 48 individually packaged 36-grid disposable membrane filtration systems with a pore size of 0.45 µm

Please see page 117 for ISO-GRID/NEO-GRID equipment and accessories.

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