

NEO-GRID™/ISO-GRID™

For Detection and Confirmation of *Salmonella* spp.



**Intended Use**

Using EF-18 Agar, the ISO-GRID and NEO-GRID Membrane Filter Systems are used to provide a method for detecting and confirming *Salmonella* spp.

**The Test**

The ISO-GRID and NEO-GRID systems are based on the principle of hydrophobic grid membrane filtration. *Salmonella* spp. are detected through the use of a unique membrane filter containing a grid of 1,600 squares. First, a portion of enrichment culture is prefiltered to eliminate any food particles present. The sample is then filtered through a hydrophobic membrane, and the membrane is placed on EF-18 Agar. EF-18 Agar is specifically formulated to detect *Salmonella* spp.

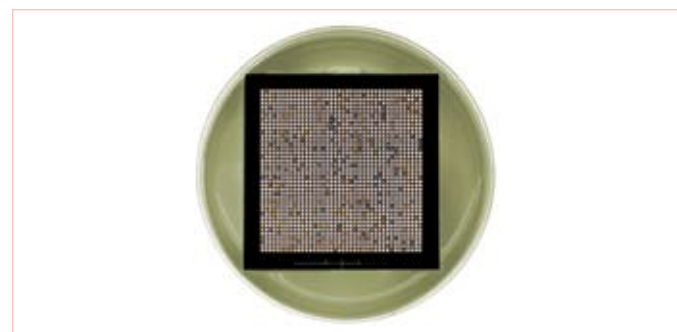
After incubation the membrane filter is examined for the presence of green colonies. Any green (presumptive *Salmonella* spp.) colonies present are confirmed using procedures detailed in the Methods Manual.

**Test Procedure**

1. Homogenize a 25 gram sample of food in 225 mL of pre-enrichment broth.
2. Incubate for 18–24 hours at 35–37°C.
3. Transfer 0.1 mL of pre-enrichment culture into 10 mL of Tetrathionate Brilliant Green Broth (TBG).
4. Incubate for 6–8 hours at 35–37°C.
5. Filter 0.1 mL of TBG culture through an ISO-GRID or NEO-GRID membrane filter.
6. Place the membrane filter on EF-18 Agar.
7. Incubate for 18–24 hours at 42°C ± 0.5°.

Refer to the Methods Manual for complete instructions, and other available test methods

**Results**



**Product Specifications**

Approvals: AOAC Official Method #991.12

**EF-18 Agar**

Proteose Peptone SM47	5 g/L
Yeast Extract	3 g/L
L-Lysine Monohydrochloride	10 g/L
Dextrose	2.5 g/L
Sucrose	15 g/L
Magnesium Sulfate 7-Hydrate	1.5 g/L
Bile Salts SM77	1.5 g/L
Sulfapyridine	0.3 g/L
Bromthymol Blue, sodium salt	0.03 g/L
Novobiocin	0.015 g/L
Agar	15 g/L
Final pH:	6.8 ± 0.1

**Ordering Information**

Prod.#	Product description
<b>For use with either the NEO-GRID or ISO-GRID Test System</b>	
6901A	EF-18 Agar
7241A	Tetrathionate Broth Base (plus Brilliant Green, not available from Neogen) Pre-enrichment Broth (see Methods Manual for appropriate broth for the sample type)
6810	1-Place Filtration Manifold
6800	3-Place Filtration Manifold
6801	6-Place Filtration Manifold
6821	Rubber Tubing (10 feet)
6822	Side-Arm Flask Assembly (1 L)
6824	Vacuum Pump - ¼ hp (Gast)
6828	Forceps
<b>For use with the NEO-GRID Test System only</b>	
6848	NEO-GRID Test System - Contains 48 individually packaged membrane filtration systems
6825	NEO-GRID Silicone Stopper
6826	Filter Tips (box of 100)
6827	Filter Bags - 24 oz Whirl-Pak (box of 250)
6829	1.0 mL Sterile Serological Pipettes (bag of 50)
<b>For use with the ISO-GRID Test System only</b>	
Please see page 108 for the required ISO-GRID equipment and accessories.	