



Reference : 01-556

Scharlau Microbiology - Technical data sheet

Product :  
**DEXTROSE TRYPTONE PURPLE BROMOCRESOL  
AGAR**

### Specification

Solid medium for the cultivation of "flat-sour" canned food spoiling microorganisms.

### Formula \* in g/L

Tryptone.....	10.00
Dextrose.....	5.00
Bromcresol purple.....	0.04
Agar.....	15.00

Final pH 6,9 ±0,2 at 25 °C

\* Adjusted and /or supplemented as required to meet performance criteria

### Directions

Suspend 30 g of powder in 1 L of distilled water and bring to the boil. Distribute in suitable containers and sterilize in the autoclave at 121°C for 15 minutes.

### Description

This medium was adopted in 1933 by the National Canners Association for the detection of microorganisms causing "flat-sour" spoilage in canned foods.

Later it was used for the detection and enumeration of all microorganisms related to acid spoilage of foods, like *Bacillus coagulans*, *Sporolactobacillus* and the thermophilic *Bacillus stearothermophilus*.

### Technique

The sample or its dilutions are inoculated into the molten medium, cooled to 50°C. Then poured into Petri dishes and incubated for 72 hours at 30-32°C (mesophiles) or for 48 hours at 55-60°C (thermophiles). After incubation the acid-producing colonies can be easily enumerated because they show a yellow zone that contrasts with the purple medium.

### Quality control

**Incubation temperature:** 32 ±1°C / 55±2°C      **Incubation time:** 24 - 48 - 72 h

**Inoculum:** Practical range 50-100 CFU (Productivity). Spiral Plate Method.

Microorganism	Growth	Remarks
<i>Staphylococcus aureus</i> ATCC® 25923	Productivity > 0.70	32 ±1°C / Yellow colonies and media
<i>Bacillus cereus</i> ATCC® 11778	Productivity > 0.70	32 ±1°C / Yellow colonies and media
<i>Geobacillus stearothermophilus</i> ATCC® 10149	Productivity > 0.70	55 ± 2°C
<i>Escherichia coli</i> ATCC® 25922	Productivity > 0.70	32 ±1°C/ Yellow colonies and media
<i>Bacillus coagulans</i> ATCC® 7050	Productivity > 0.70	55 ± 2°C

### References

- DOWNES, F.P. & K. ITO (2001) Compendium of methods for the Microbiological Examination of Foods.4th ed. APHA. Washington.
- HORWITZ, W. (2000) Official Methods of Analysis. AOAC International, Gaithersburg. MD.
- NATIONAL CANNERS ASSOCIATION (1933) Bacterial Standard for Sugar.
- NATIONAL CANNERS ASSOCIATION (1954) A Laboratory Manual for the Canning Industries. 2nd ed. Washington.
- NATIONAL CANNERS ASSOCIATION (1968) Laboratory Manual for Food Canners and Processors. Vol. 1 Washington.
- VANDERZANT, C, & D. F. SPLITTSTOESSER (1992) Compendium of Methods for the Microbiological Examination of Foods. 3rd Ed. APHA. Washington DC. USA.

### Storage

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+4 °C to 30 °C).