



## TSC - PERFRINGENS AGAR BASE

---

### INTENDED USE

Perfringens Agar Base (TSC) is used with selective and differential supplements for the recovery of *Clostridium perfringens*.

### FORMULA

Ingredients in grams per liter of purified water.

Tryptone	15.00	Sodium metabisulfite	1.00
Soy peptone	5.00	Ferric ammonium citrate	1.00
Yeast extract	5.00	Agar	14.00

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

### STORAGE

Tubes and bottles: 2 - 8°C

Dehydrated media: 2 - 30°C

The expiration date on the product label applies to the product in its intact packaging when stored as directed.

### DIRECTIONS FOR PREPARATION

#### For dehydrated media

1. Dissolve 41 g in 1 L of purified water. Mix thoroughly.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Fill tubes or bottles.
4. Autoclave for 15 minutes at 121°C.

#### For bottle media

1. Heat the bottle at 95-100°C in water bath.
2. Mix well and cool to 45-47°C.
3. Pour 20 ml in 18x180 mm sterile tubes.

### LIMITATION OF THE PROCEDURE

This product is for laboratory use only.

*Clostridium perfringens* produce black colonies on TSC. All black colonies should be confirmed.

This medium could be added with egg yolk emulsion to detect lecithinase activity without D-cycloserine for water testing.

### QUALITY CONTROL

Physical appearance: Prepared medium is solid and medium beige color.

Final pH: 7.6 ± 0.2 at 25°C

#### Expected Cultural Response

Organism	Inoculum CFU	Incubation	Results
<i>Clostridium perfringens</i> ATCC 13124 • WDCM 00007	10 <sup>-10</sup> 2	20 h ± 2 h 37°C ± 1°C	Growth
<i>Clostridium perfringens</i> ATCC 12916 • WDCM 00080	10 <sup>-10</sup> 2	20 h ± 2 h 37°C ± 1°C	Growth
<i>Escherichia coli</i> ATCC 8739 • WDCM 00012	10 <sup>-3</sup> ·10 <sup>4</sup>	20 h ± 2 h 37°C ± 1°C	Inhibition

*This is an example of organisms routinely used for testing*

**REFERENCE**

1. Downes, F.P. & K. Ito. 2001. Compendium of Methods for the Microbiological Examination of Foods. 4<sup>th</sup> ed. APHA. Washington DC. USA.
2. Horwitz, W. 2000. Official Methods of Analysis. AOAC International. Gaithersburg. MD. USA.
3. U.S. Food and Drug Administration. 1998. Bacteriological analytical manual, 8<sup>th</sup> ed. AOAC International, Gaithersburg, Md. USA.
4. ISO 7937:2004. Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of *Clostridium perfringens* - Colony-count technique.
5. ISO 15213:2003. Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of sulfite-reducing bacteria growing under anaerobic conditions.
6. ISO 6461-1:1986. Water quality. Detection and enumeration of the spores of sulfite-reducing anaerobes (*Clostridia*). Method by enrichment in a liquid medium.
7. ISO 6461-2:1986. Water quality. Detection and enumeration of the spores of sulfite-reducing anaerobes (*Clostridia*). Method by membrane filtration.