



## Analysis of Clostridium perfringens (including spores) according to ISO 14189

The TSC medium is a modification of the classic TSN Agar in which traditional antibiotics, polymyxin and neomycin have been replaced by cycloserine. Cycloserine has been found to be more selective for *Clostridium perfringens*, and reduces the production of diffuse blackening.

TSC is the medium recommended in ISO 14189 for the determination of *Clostridium perfringens* in water by the membrane filtration method and also according to European Directive 2015/1787 of 6 October 2015.

#### Main advantages

- Convenience: available in powder or ready to use
- Formulation according to ISO standard
- Certificate of analysis according to ISO 11133

#### Technique

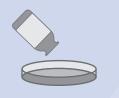
**1.** Collect, dilute and prepare samples and volumes to be filtered as required according to specifications, directives, official standards or expected results.



**2.** Filter the sample through a 0.45  $\mu$ m pore membrane and place it on the surface of the agar.



3. Alternatively cover the membrane with a second layer of melted TSC agar (cooled in a water bath at 45 °C). It is not necessary to add cycloserine in the TSC agar for the overlay.



4. Incubate the plates anaerobically at  $(44 \pm 1)$ °C for  $(21 \pm 3)$  h. A longer incubation time or a different incubation temperature may be required depending on the sample, specifications, etc.



**5.** After incubation, enumerate the colonies with a black iron sulfide precipitate.

**6.** Confirmation of *Clostridium perfringens* colonies is required by additional microbiological or biochemical tests (according to ISO).





Description	Code	Package
TSC Agar Base (ISO 14189, 7937) (Dehydrated Culture Media) for microbiology*	415576.1210	500 g
TSC Agar (ISO 14189, 7937) (Prepared Plate (Ø 55 mm)) for microbiology	445576.0922	30 plates
TSC Agar Base (ISO 14189, 7937) (Prepared Bottles) for microbiology*	495576.0922	10 x 100 ml
Supplement		
Clostridium perfringens TSC (supplement) for microbiology	417206.02132	10 vials**
Accessory		
2.5 L Anaerobiosis Jar	ANJARRMC	1 unit

\* Supplement needed

\*\* One vial is sufficient for 100 ml medium



IP-046EN

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Perpared Plate (0 53 mm) Place Prepareda (0 55 mm)

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