



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The TSC medium is a modification of the classic TSN Agar in which traditional antibiotics, polymyxin and neomycin have been replaced by cycloserine.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 μ 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 ± 1) °C for (21 ± 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

AppliChem GmbH Ottoweg 4 DE-64291 Darmstadt Germany Phone +49 6151 9357 0 Fax +49 6151 9357 11 info.de@itwreagents.com

Nova Chimica Srl

Via G. Galilei, 47 I-20092 Cinisello Balsamo (Milano) Italy Phone +39 02 66045392 Fax +39 02 66045394 info.it@itwreagents.com

PanReac Química SLU

C/ Garraf 2, Polígono Pla de la Bruguera E-08211 Castellar del Vallès (Barcelona) Spain Phone +34 937 489 400 Fax +34 937 489 401 info.es@itwreagents.com

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

www.itwreagents.com