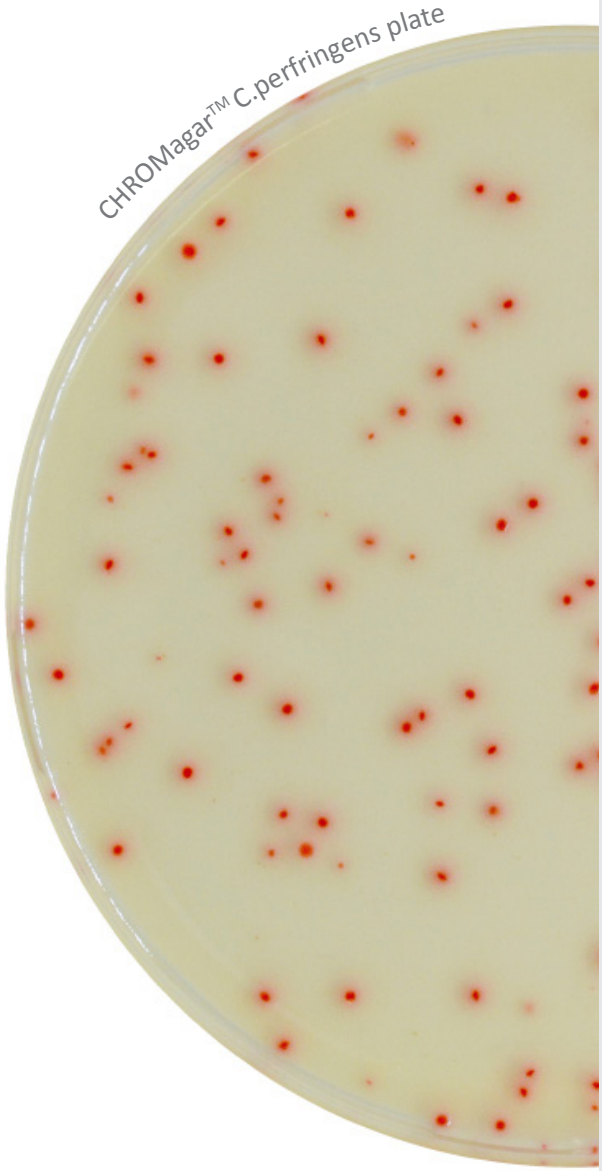
CHROMagar™ C.perfringens

Instructions For Use

Available in several languages

NT-EXT-092

Version **3.0**



CHROMagar™
The Chromogenic Media Pioneer

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CHROMagar™ C.perfringens

MEDIUM PURPOSE

Chromogenic medium for detection and enumeration of *Clostridium perfringens.*

"*Clostridium perfringens* is involved in food poisoning and animals' infections. Beef, poultry, gravies, and dried or pre-cooked foods are common sources of *C. perfringens* infections. *C. perfringens* infection often occurs when foods are prepared in large quantities and kept warm for a long time before serving. Everyone is susceptible to food poisoning from *C. perfringens*. The very young and elderly are most at risk of *C. perfringens* infection and can experience more severe symptoms that may last for 1 to 2 weeks. Complications, including dehydration, may occur in severe cases."[1]

1- CDC - Centers for Disease Control and Prevention

COMPOSITION

The product is composed of a powder base (B) and 2 supplements (S1) + (S2).

Product =	Base (B) +	Supplement (S1) +	Supplement (S2)
Total g/L	50.9 g/L	2.0 g/L	0.12 g/L
Composition g/L	Agar 15.0 Peptones and yeast extract 25.0 Salts 6.0 Chromogenic and selective mix 1.4 Growth factors 3.5	Selective mix 2.0	Growth factors 0.12
Aspect	Powder Form	Powder Form	Powder Form
STORAGE	**15/30 °C**	**2/8 °C**	**2/8 °C**
FINAL MEDIA pH	7.6 +/- 0.2		

PREPARATION **(Calculation for 1 L)**

Step 1
Preparation of the base CHROMagar™ C. perfringens Base (B)

- Disperse slowly 50.9 g of powder base in 1 L of purified water.
- Stir until agar is well thickened.
- Heat and bring to boiling (100 °C) while swirling or stirring regularly.
- AUTOCLAVE at 121 °C during 15 min.
- Mix when removing it from the autoclave.
- Cool in a water bath to 45/50 °C, swirling or stirring gently.

Step 2
Preparation of the Supplement (S1)

- In a transparent vessel, add 2 g of CHROMagar™ C.perfringens suppl. S1 in 20 mL of purified water.
- Swirl well until complete dissolution.
- Filter to sterilize at 0.45 µm.

Step 3
Preparation of the Supplement (S2)

- Add 0.12 g of CHROMagar™ C.perfringens suppl. S2 in 1 mL of purified water.
- Filter to sterilize at 0.45 µm.

Step 4
Mixing of the prepared base (B) and the prepared supplements (S1) and (S2)

- Add 20 mL/L of the supplement (S1) solution to the melted base at 45/50 °C.
- Add 1 mL/L of the supplement S2 solution to the melted base at 45/50 °C.
- Swirl or stir gently to homogenise.
- Pour into sterile Petri dishes
- Let it solidify and dry.

Storage

- Store in the dark before use.
- Prepared media plates can be kept for one day at room temperature.
- Plates can be stored for up to one month under refrigeration (2/8 °C) if properly prepared and protected from light and dehydration.

INOCULATION

Related samples can be processed by direct streaking on the plate.

- If the agar plate has been refrigerated, allow to warm to room temperature before inoculation.
- Streak sample onto plate.
- Incubate in anaerobic conditions at 37 °C for 24 hours.

Advice 1: We advise to use Cellulose Nitrate, Cellulose Ester or Nylon membranes for optimal performances.

Warning 1: Do not use Celulose Acetate, Polyethersulfone and Polycarbonate membranes.

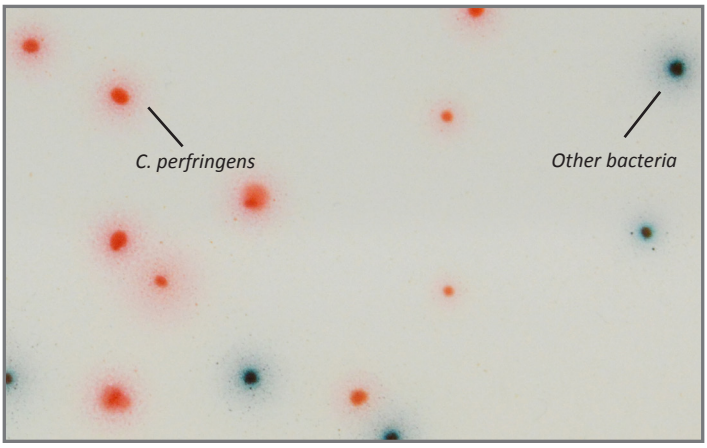
Typical Samples
e.g. food, water, environmental samples *** spreading technique, pouring technique, filtration technique

CHROMagar™ C.perfringens

INTERPRETATION

Microorganism	Typical colony appearance
C. perfringens	→ orange
Other bacteria	→ blue or inhibited

Typical colony appearance



The pictures shown are not contractual.

PERFORMANCE & LIMITATIONS

- Definite identification may require additional testing.
- Some strains of *C. sordelii* can be detected as false positives and can be distinguished by biochemical tests like indole or proline.
- Some globules can be observed on the background of the media. They don't change its performance.

QUALITY CONTROL

Please perform Quality Control according to the use of the medium and the local QC regulations and norms.
Good preparation of the medium can be tested, isolating the ATCC strains below:

Microorganism	Typical colony appearance
C. perfringens ATCC® 3624	→ orange
C. perfringens ATCC® 12920 (NCTC 8679)	→ orange
C. perfringens ATCC® 12916 (WDCM 00080)	→ orange
E. faecalis ATCC® 29212 (WDCM 00087)	→ inhibited
E. coli ATCC® 25922 (WDCM 00013)	→ inhibited

WARNINGS

- Do not use plates if they show any evidence of contamination or any sign of deterioration.
- Do not use the product beyond its expiry date or if product shows any evidence of contamination or any sign of deterioration.
- For Laboratory use. This laboratory product should be used only by trained personnel in compliance with good laboratory practices.
- Any change or modification in the procedure may affect the results.
- Any change or modification of the required storage temperature may affect the performance of the product.
- Unappropriate storage may affect the shelf life of the product.
- Recap the bottles/vials tightly after each preparation and keep them in a low humidity environment, protected from moisture and light.
- For a good microbial detection: collection and transport of specimen should be well handled and adapted to the particular specimen according to good laboratory practices.

DISPOSAL OF WASTE

After use, all plates and any other contaminated materials must be sterilized or disposed of by propriate internal procedures and in accordance with local legislations. Plates can be destroyed by autoclaving at 121 °C for at least 20 minutes.

REFERENCES

Please refer to our website page «Publications» for scientific publications about this particular product.
Web link: http://www.chromagar.com/publication.php

IFU/LABEL INDEX

REF Catalogue reference

Consult instructions for use

Quantity of powder sufficient for X liters of media

Expiry date

Required storage temperature

Store away from humidity

Protect from light

Manufacturer

Need some Technical Documents?

Available for download on www.CHROMagar.com

- Certificate of Analysis (CoA) --> One per Lot
- Material Safety Data Sheet (MSDS)

Pack Size		Ordering References		Base (B)		Supplement (S1)		Supplement (S2)
5000 mL (250 Tests of 20 mL)	=	PF652	=	PF652(B) Weight: 254.5 g	+	PF652(S1) Weight: 10 g	+	PF652(S2) Weight: 0.6 g

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