



COMPASS *Bacillus cereus* Agar

INTENDED USE

COMPASS *Bacillus cereus* Agar is a medium used for the detection and enumeration of spores and vegetative forms of presumptive *Bacillus cereus* in food products and animal feeding stuffs. Detection or enumeration can be performed directly on this medium without purification steps, biochemical confirmation (glucose fermentation, Voges-Proskauer, nitrate reduction and hemolysis testing) and/or microscopic examination normally done within the confines of standardized methods (notably, ISO 7923 and ISO 21871).

COMPASS *Bacillus cereus* Agar for the enumeration of presumptive *Bacillus cereus* is officially certified by AFNOR Certification, under the reference number BKR 23/06-02/10, of which the validity runs until February 5th, 2014.

PRINCIPLES

- The chromogenic substrate included in the culture medium is hydrolyzed by *Bacillus cereus* : the colonies that develop present a characteristic green coloration.
- The selective system used allows the inhibition of the majority of contaminating secondary flora.
- The association between the chromogenic substrate and the selective agents in the formulation of **COMPASS *Bacillus cereus* Agar** allows a direct enumeration of characteristic colonies after only 24 hours incubation, without confirmation.

PREPARATION

- Melt the base medium (BM130) for the minimum amount of time necessary in order to achieve total liquefaction.
- Cool and maintain at 44-47°C.
- Per 100 mL of base, aseptically add 1 mL of reconstituted **COMPASS *Bacillus cereus* Selective Supplement (BS069)**.
- Mix well.
- **If following a surface inoculation protocol**, pour the appropriate amount of complete media into sterile Petri dishes and let solidify on a cool surface. Dry in an incubator with the covers partially removed.
- **If following a pour plate protocol**, follow the indications in the Instructions for Use section.

INSTRUCTIONS FOR USE

Surface inoculation :

- To the surface of pre-poured plates (BM126), or to plates prepared as above from the base + supplement, transfer 0.1 mL of the sample to be tested and its serial dilutions.
- Spread the inoculum with a sterile triangle or "hockey stick".
- Incubate at (30 ± 1)°C for 24 to 27 hours.

Pour plate inoculation :

- Transfer 1 mL of the sample to test and/or its serial dilutions to the bottom of empty, sterile Petri dishes.
- Add approximately 15 mL of the complete media.
- Mix by swirling and let solidify on a cool surface.
- Incubate at $(30 \pm 1)^\circ\text{C}$ for 24 to 27 hours.

RESULTS

Count green colonies with a diameter superior to 1 mm (surface inoculation) or 0.5 mm (pour plate inoculation) in plates not exceeding 150 colonies.

The expression of the results should be made conform to the recommendations established in ISO 7218 (August 2007).

NOTE :

When grown on the surface of COMPASS *Bacillus cereus* Agar, the aspect of colonies belonging to the group *Bacillus cereus* may be variable as a function of the strains involved.

NOTE :

In case of doubt on the characteristic aspect of colonies, a confirmation step may be performed according to the haemolysis test described in ISO 7932.

TYPICAL COMPOSITION

(can be adjusted to obtain optimal performance)

For 1 liter of medium :

- Peptones26.0 g
- Yeast extract5.0 g
- NaCl5.0 g
- Selective agents.....12.7 g
- Chromogenic substrate0.1 g
- Agar16.0 g

pH of the ready-to-use media at 25°C : $6,8 \pm 0,2$.

QUALITY CONTROL

- Prepared media : clear beige or tan agar.
- Typical cultural response after 24 hours incubation at 30°C :

Microorganisms	Growth (Productivity ratio : P_R)	Characteristics
<i>Bacillus cereus</i> ATCC® 11778	$\geq 50 \%$	green colonies
<i>Bacillus cereus</i> ATCC 14579	$\geq 50 \%$	green colonies
<i>Bacillus subtilis</i> ATCC 6633	inhibited, score 0	
<i>Escherichia coli</i> ATCC 25922	inhibited, score 0	

PHOTO SUPPORT :

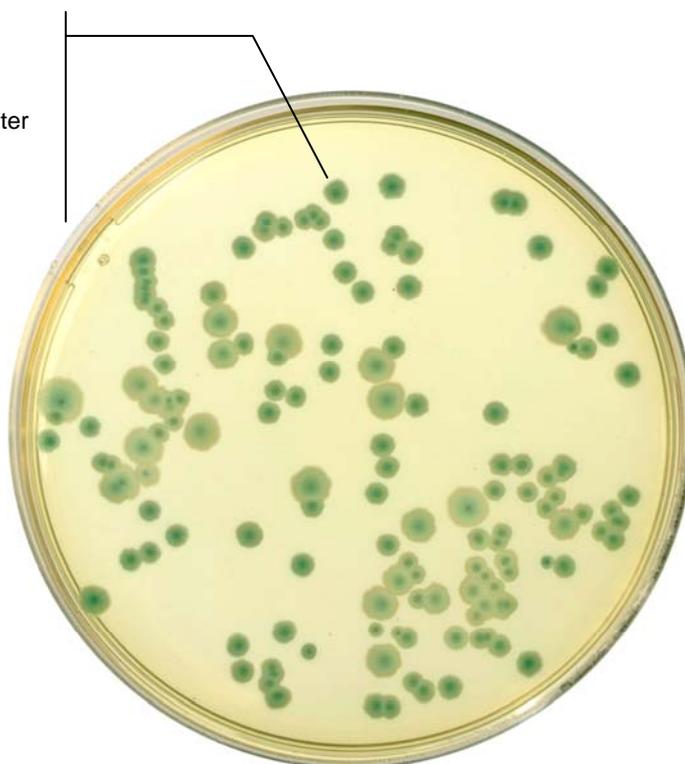


Reference : BM12608 ; BM13008 + BS06908

Media used for : The detection and enumeration of spores and vegetative forms of presumptive *Bacillus cereus* in food products and animal feeding stuffs.

Bacillus cereus

Green colour with a diameter superior to 1mm when spread on the agar



COMPASS® *Bacillus cereus* Agar

Ref : BM12608

Incubation 24 hours at 30°C (surface inoculation)

Green colonies with a diameter superior to 1 mm
(specific enzymatic activity)

STORAGE / SHELF LIFE

Pre-poured media in Petri dishes (Ø 90 mm) :

- Store between 2 - 8°C, shielded from light.
- The expiry date is indicated on the label.

Prepared medium (benchmark value*) :

- Complete media in plates : 15 days at 2-8°C, shielded from light.

Ready-to-melt media in vials,

COMPASS *Bacillus cereus* Selective Supplement :

- Store between 2-8°C, shielded from light.
- The expiration dates are indicated on the labels.

PACKAGING

Code

Pre-poured media in Petri dishes (Ø 90 mm) :

- 20 plates

BM12608

Ready-to-melt media in vials :

- 10 x 100 mL

BM13008

COMPASS *Bacillus cereus* Selective Supplement :

- 10 vials qs. 100 mL

BS06908

BIBLIOGRAPHY

XP CEN ISO/TS 11133-2 (V 08-104-2). January 2004. Food Microbiology. Guide for the preparation and production of culture media. Part 2 : General guidance for performance tests of culture media.

ISO 7932. June 2004. Microbiology of food and animal feeding stuffs. Horizontal method for the enumeration of presumptive *Bacillus cereus* – Colony count technique at 30°C.

ISO 7218. August 2007. Microbiology of food and animal feeding stuffs. General requirements and guidance for microbiological examinations.



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*Benchmark value refers to the expected shelf life when prepared under standard laboratory conditions following manufacturer's instructions. It is provided as a guide only and no warranty, implied or otherwise, is associated with this information.

The information provided on the package take precedence over the formulations or instructions described in this document.

The information and specifications contained in this technical data sheet date from 2011-04-05.

They are susceptible to modification at any time, without warning.

Code document : BM126/E/2007-10 : 8.