

## TM 1631-CHROMOGENIC ENTEROBACTER SAKAZAKII AGAR

### INTENDED USE

For isolation and identification of *Cronobacter sakazkii* from dairy and food products.

### PRODUCT SUMMARY AND EXPLANATION

Enterobacter species are widely distributed in nature occurring in fresh water, soil, sewage, plants, vegetables, animal and human faeces. *Cronobacter sakazkii* has been closely associated with neonatal meningitis and sepsis. The chromogenic substrate in Chromogenic Enterobacter Sakazakii Agar is cleaved specifically by the glucosidase enzyme possessed by *Enterobacter* species resulting in formation of blue-green colonies. Other organisms, which do not cleave this substrate, produce yellow coloured colonies. Incorporation of the chromogenic mixture in the media renders an intense blue colour to *C.sakazakii* colonies whereas light blue green colour to the other *Enterobacter* species.

### COMPOSITION

Ingredients	Gms / Ltr
Agar	15.000
Tryptone	15.000
Chromogenic mixture	10.170
Soya peptone	5.000
Sodium chloride	5.000
Sodium thiosulphate	1.000
Sodium deoxycholate	0.500

### PRINCIPLE

Tryptone and soya peptone provide nitrogenous and carbonaceous compounds, long chain amino acids, vitamins and other essential growth nutrients. Sodium chloride helps in maintaining the osmotic equilibrium of the medium. Sodium deoxycholate inhibits the accompanying gram-positive flora.

### INSTRUCTION FOR USE

- Dissolve 51.67 grams in 1000 ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Cool to 45-50°C.
- Mix well and pour into sterile petriplates.

### QUALITY CONTROL SPECIFICATIONS

Appearance of powder	:	Light yellow to pink homogeneous free flowing powder
Appearance of prepared medium	:	Purple coloured, clear to slightly opalescent gel.
pH (at 25°C)	:	7.3± 0.2

### INTERPRETATION

Culture characteristics observed after incubation period. Recovery rate is considered 100% for bacteria growth on Soya Agar.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
<i>*Cronobacter sakazakii</i>	12868	50-100	Good-Luxuriant	>=50%	Blue	35 ± 2°C	18 - 24 Hours
<i>Escherichia coli</i>	25922	50-100	Good-Luxuriant	>=50%	Yellow	35 ± 2°C	18 - 24 Hours
<i>Klebsiella pneumoniae</i>	13883	50-100	Good-Luxuriant	>=50%	Green	35 ± 2°C	18 - 24 Hours
# <i>Klebsiella aerogenes</i>	13048	50-100	Good-Luxuriant	>=50%	Bluish green	35 ± 2°C	18 - 24 Hours
<i>Staphylococcus aureus</i>	25923	≥ 1000	Inhibited	0%	-	35 ± 2°C	18 - 24 Hours
<i>Enterococcus faecalis</i>	29212	≥ 1000	Inhibited	0%	-	35 ± 2°C	18 - 24 Hours

# - Formerly known as *Enterobacter aerogenes*

\*- Formerly known as *Enterobacter sakazakii*

### PACKAGING

In pack size of 100gm & 500gm bottles.

### STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.










**Product Deterioration:** Do not use if powder show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

### DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

### REFERENCES

1. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C
2. Muytjens H. L., Zanen H. C., Sonderkamp H. J. et al, J. ClinMicrobiol 18:115-120, 1983.

 Good Manufacturing Practices Certified	 Best Before	 Quantity	 Catalogue Number	 Manufacturer
 Temperature Unit	 Lot / Batch Number	 Consults Instructions for Use	 QR Code	

**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

**\*For Lab Use Only**

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