CHLORAMPHENICOL YEAST GLUCOSE AGAR

CYGA-0HI-500

- **Principle**

Chloramphenicol Yeast Glucose Agar (CYGA) is a selective medium used for the enumeration of yeasts and moulds, particularly in milk and dairy products.

The medium supports fungal growth through the presence of yeast extract and glucose, which provide essential nutrients and a fermentable carbohydrate source. The incorporation of chloramphenicol inhibits bacterial growth, allowing fungi to develop without interference from accompanying bacterial flora.

CYGA is widely applied in food microbiology and quality control for assessing fungal contamination in dairy products. Yeasts typically form smooth, creamy colonies, while moulds develop filamentous, spreading colonies with characteristic pigmentation depending on the species.

- **Regulatory compliance**

This product is manufactured under a quality management system in accordance with ISO 9001 and ISO 13485, and its formulation and quality control comply with applicable international standards, such as ISO 11133, where relevant.

- **Composition**

Ingredients	**g/L**
Yeast Extract	5.00
Glucose	20.00
Chloramphenicol	0.10
Agar	15.00

- **Preparation**

Dissolve 40 grams in 1,000 ml distilled water, boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs. pressure (121°C) for 15 min, cool it to 42-45 °C and distribute aseptically in sterile petri plates. Ensure complete solidification and inoculate test sample aseptically.

- **Applications and use**

Recommended for enumerating yeasts and moulds in milk and dairy products.

- **Quality control**

Solubility	w/o rests
Appearance	Fine powder
Colour of the dehydrated medium	Beige
Colour of the prepared medium	Light amber
Final pH (25 °C)	6.6 ± 0.2

- **Microbiological test**

Fungi cultural characteristics observed after an incubation at 25±2°C for 2-5 days.

Microorganism	ATCC	Inoculum (CFU)	Growth	Recovery
Aspergillus brasiliensis	16404	50-100	Good	≥60%
Candida albicans	10231	50-100	Luxuriant	≥70%
Escherichia coli	8739	50-100	Inhibited	-
Staphylococcus aureus	25923	50-100	Inhibited	-

- **Storage**

The product is highly hygroscopic; keep the container always closed and store it properly as per the conditions mentioned on the label. The declared expiry is valid only when stored as per the conditions mentioned on the label. Temp. Min.:2 °C Temp. Max.:25 °C.

Note: Sterilize media immediately after reconstitution.

- **Bibliography**

Atlas, R. M. (2005). Handbook of media for environmental microbiology. CRC press.

Marshall, (Ed), (1993), Standard Methods for Examination of Dairy Products, 16th Ed., American Public Health Association, Washington, D. C.

- **Product use limitation**

This product is developed, designed and supplied exclusively for research use only. It is not intended for diagnostic applications or drug development, and it is not suitable for administration to humans or animals.