



Rapid Y/M Agar

Instructions For Use

ENGLISH

Selective medium for enumeration of yeasts and moulds.

DESCRIPTION

Rapid Y/M Agar is a medium used for selective isolation and enumeration of yeasts and moulds from food, animal feeding stuffs, water and environmental samples.

The medium formulation allows to accelerate detection compared to other media commonly recommended for cultivation of yeasts and moulds.

Unlike DRBC and DG18, which are used for high (ISO 21527-1) and low (ISO 21527-2) water activity products, respectively, Y/M Agar can be used with samples regardless of their water activity.

TYPICAL FORMULA*

	(g/litre)
Peptones	10.0
Glucose	40.0
Magnesium Sulfate	2.0
Growth Factors	0.1
Selective Agents	0.6
Dye Indicator	0.02
Agar	15.0
Final pH 7.1 ± 0.2 at 25°C	

*Adjusted and/or supplemented as required to meet performance specifications.

METHOD PRINCIPLE

Peptones provide amino acids, carbon, nitrogen, vitamins and minerals for organisms growth. Glucose is the fermentable carbohydrate. Magnesium sulfate provides divalent cations and sulfur. Selective agents are incorporated into the medium to reduce colony diameters of spreading fungi and to inhibit the growth of accompanying bacterial flora. Agar is the solidifying agent.

PREPARATION

Medium in bottles Melt the content of the bottle in a water bath at 100°C (loosing the cap partially removed) until completely dissolved. Then screw the cap and check the homogeneity of the dissolved medium, if it is the case turning the bottle upside down. Cool at 45-50°C, mix well avoiding foam formation and aseptically distribute into Petri dishes.

TEST PROCEDURE

Inoculate plates directly by spreading technique using 1 ml of initial suspension or decimal dilutions of the test sample.

Incubate the plates aerobically at 30 ± 1°C for 60 ± 6 hours. It is recommended to incubate for up to 72 hours, if colonies appear faint.

INTERPRETING RESULTS

Observe for fungal growth resulting in a color change of the medium to yellow.

Count characteristic colonies/propagules after 2-day incubation and again at the end of the incubation period.

Select plates producing countable colonies and calculate the number of yeasts and moulds per gram or per millilitre of sample.

Colonies should be further isolated and identified with appropriate procedures.

STORAGE

Store bottles and prepared plates at 2-8°C away from light. Do not use the product beyond its expiry date on the label or if product shows any evidence of contamination or any sign of deterioration.

Avoid quick temperature shifts to prevent condensation.

SHELF LIFE

Medium in bottles: 1 year.

Ready-to-use plates: 6 months.

QUALITY CONTROL

Appearance: Slightly opalescent, purple.

Expected cultural response:

Control strain		Inoculum	Incubation	Specification
<i>Saccharomyces cerevisiae</i>	WDCM 00058 (ATCC 9763 NCPF 2275)	50-100 CFU	48-72 h / 30 ± 1°C	Good growth (P _R ≥ 0.5)
<i>Candida albicans</i>	WDCM 00054 (ATCC 10231 NCPF 3179)			
<i>Aspergillus brasiliensis</i>	WDCM 00053 (ATCC 16404 NCPF 2275)			
<i>Escherichia coli</i>	WDCM 00013 (ATCC 25922 NCTC 12241)	10 ⁴ -10 ⁶ CFU		Total inhibition
<i>Bacillus subtilis</i>	WDCM 00003 (ATCC 6633 NCTC 10400)			

A productivity ratio (P_R) of 0.5 is equivalent to a recovery rate of 50%.

WARNING AND PRECAUTIONS

For professional use only. Operators must be trained and have certain experience. Please read the instructions carefully before using this product. Reliability of assay results cannot be guaranteed if there are any deviations from the instructions in this document.

Consult the Safety Data Sheet (SDS) for information regarding hazards and safe handling practices.









DISPOSAL OF WASTE

Disposal of waste must be carried out according to national and local regulations in force.

BIBLIOGRAPHY

- EN ISO 11133:2014+Amd1:2018. Microbiology of food, animal feed and water -- Preparation, production, storage and performance testing of culture media.
- ISO 21527-1:2008. Microbiology of food and animal feeding stuffs -- Horizontal method for the enumeration of yeasts and moulds. Part 1: Colony Count Technique in products with water activity greater than 0,95.
- ISO 21527-2:2008. Microbiology of food and animal feeding stuffs -- Horizontal method for the enumeration of yeasts and moulds. Part 2: Colony Count Technique in products with water activity less than or equal to 0,95.
- Beuchat and Cousin (2001) In Downes and Ito (ed.). Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association. Washington, D.C.
- U.S. Food and Drug Administration (1995) Bacteriological analytical manual, 8th ed. AOAC International, Gaithersburg, Md.
- Banks, Board and Paton (1985) Lett. Appl. Microbiol. 1:7.
- King, Hocking and Pitt (1979) Appl. Environ. Microbiol. 37:959.

TABLE OF SYMBOLS

LOT Batch code	 Keep away from sunlight	 Manufacturer	 Use by	 Fragile, handle with care
REF Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Caution, consult Instruction For Use	 Do not reuse

Product	Format	Packaging	Ref.
Rapid Y/M Agar	90 mm Plate	20 plates	10456
Rapid Y/M Agar	Bottle	6 x 200 ml	412470

This IFU document and the SDS are available from the online Support Center:

liofilchem.com/ifu-sds



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