



MY 40 Agar

Medium for osmophilic microorganisms.

INTENDED PURPOSE

MY 40 Agar is a culture medium used for detection and isolation of osmophilic microorganisms from various samples.

DESCRIPTION

MY 40 Agar is a medium used for cultivation of different osmophilic microorganisms which are capable of growing over a wide range of salt or sugar concentrations. Only a few species can grow in environments having supersaturated brine and sugar concentrations, which are characterized by high osmotic pressures (i.e., reduced water activity). Osmophilic yeasts are usually the cause of spoilage of high-sugar food, such as dry fruits, cakes, jams, dried meat, salted fish, grains, cereals and cereal products, flours, nuts, spices and condiments, etc.

TYPICAL FORMULA*

(g/l)

Malt Extract	20.0
Yeast Extract	5.0
Sucrose	400.0
Agar	20.0

*Adjusted and/or supplemented as required to meet performance specifications.
Grams per liter of purified water

METHOD PRINCIPLE

Malt extract and yeast extract supply nitrogenous nutrients, amino acids and vitamins. The high concentration of sucrose satisfies the nutritional need of these yeasts. Sucrose acts as a preservative by its ability to reduce water activity and to increase osmotic pressure to a level where the growth of even the most osmophilic microorganisms is no longer possible. Agar is the solidifying agent.

PREPARATION

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.

MATERIALS REQUIRED BUT NOT PROVIDED

Standard microbiological supplies and equipment such as: Water bath, sterile Petri plates, test tubes, inoculating loops, swabs, incubator, quality control organisms.

TEST PROCEDURE

Inoculate the sample or material to be tested into the medium by the pour-plate or spread method.

Incubate at 25 ± 1°C for 2 to 7 days.

INTERPRETING RESULTS

Observe for microbial growth. For identification of yeast and moulds, select areas of fungal growth and remove for high microscopic examination or inoculate on suitable isolation or identification media.

STORAGE

Store bottles at 10-25 °C, in a dry environment, in its original container tightly closed. 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.

SHELF LIFE

2 years

QUALITY CONTROL

Appearance of Medium: Amber coloured slightly opalescent, yellowish to beige.

Expected Cultural Response:

Control strain	Incubation	Criteria	Specification
<i>Aspergillus brasiliensis</i> ATCC® 16404	48 h and up to 1 week/ 25 ± 1°C	Good growth (P _R ≥ 0.7)	Good Growth
<i>Saccharomyces cerevisiae</i> ATCC® 9763			Good Growth

Please refer to the actual batch related Certificate of Analysis (CoA).

PERFORMANCE CHARACTERISTICS

Performance testing of MY 40 Agar was carried out using the QC strains listed above. The results obtained met the established criteria.

LIMITATIONS

Invalid results can be caused by poor specimen quality, improper sample collection, improper transportation, improper laboratory processing, or a limitation of the testing technology. The operator should understand the principles of the procedures, including its performance limitations, in advance of operation to avoid potential mistakes.

Due to nutritional variation, some strains may result in poor growth or fail to grow on this medium

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

See the references at the end of this document.

TABLE OF SYMBOLS

See the table of symbols at the end of this document.

ORDER INFORMATION

Product	Format	Packaging	Ref.
MY 40 Agar	Bottle	6 x 200 ml	412480

Revision History

Revision	Release Date	Change Summary
0	2024-11-12	Document creation

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

liofilchem.com/ifu-sds

References

1. 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.
2. Tilbury RH (1980) "Biology and Activities of Yeasts", Skinner and others (Ed.), Academic Press, London.
3. Rose AH and Harrison JS (1970) The Yeasts, Vol. 3, Academic Press, New York.

Table of Symbols

	Batch code
	Catalogue number
	Manufacturer
	Use by
	Fragile, handle with care
	Temperature limitation
	Contains sufficient for <n> tests
	Consult instructions for use
	Do not reuse
	Keep away from sunlight



Liofilchem® s.r.l.

Via Scozia, 64026 Roseto degli Abruzzi (TE) Italy

Tel. +39 0858930745 Fax +39 0858930330 www.liofilchem.com liofilchem@liofilchem.com