



PRODUCT SPECIFICATION SHEET

Standard Nutrient Agar (DM625)

Intended Use

Standard Nutrient Agar (DM625) is recommended for cultivation and enumeration of not particularly fastidious microorganisms.

Product Summary and Explanation

Standard Nutrient Agar is a general purpose medium for the cultivation of non-fastidious organisms from water and wastewater, dairy and food products and is formulated as per the recommendation of APHA.^(1,2)

Principles of the Procedure

Standard Nutrient Agar contains peptic digest of lean meat provides the amino acids and large chain peptides. Beef extract (meat infusion) provides water soluble substances like carbohydrates, vitamins, organic nitrogen compounds and salts.⁽³⁾ Sodium chloride helps to maintain the osmotic equilibrium of the medium.

Formula / Liter

Ingredients	Gms / Liter
Beef extract	10.00
Peptic digest of lean meat from	500.00
Sodium chloride	5.00
Agar	20.00
Final pH: 7.6 ± 0.2 at 25°C	
Formula may be adjusted and/or supplemented as required to meet performance specifications	

Precautions

1. For Laboratory Use only.
2. IRRITANT. Irritating to eyes, respiratory system, and skin.

Directions

1. Suspend 45 grams of the medium in one litre of distilled water.
2. Heat to boiling to dissolve the medium completely.
3. Autoclave at 121°C, 15 psi pressure, for 15 minutes / validated cycle.
4. Mix well before pouring in sterile Petri plates.

Quality Control Specifications

Dehydrated Appearance	Yellowish brown coloured homogeneous free flowing powder
Prepared Medium	Light amber coloured clear to slightly opalescent gel forms in petri plates
Reaction of 4.5% Solution	pH : 7.6 ± 0.2 at 25°C
Gel Strength	Firm, comparable with 2.0% agar gel

Expected Cultural Response: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Sr. No.	Organisms	Results to be achieved		
		Inoculum (CFU)	Growth	Recovery
1.	<i>Escherichia coli</i> ATCC 25922	50-100	good-luxuriant	≥70%





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2.	<i>Staphylococcus aureus ATCC 25923</i>	50-100	good-luxuriant	$\geq 70\%$
3.	<i>Pseudomonas aeruginosa ATCC 27853</i>	50-100	good-luxuriant	$\geq 70\%$
4.	<i>Streptococcus pneumoniae ATCC 6303</i>	50-100	good-luxuriant	$\geq 70\%$
5.	<i>Salmonella Typhi ATCC 6539</i>	50-100	good-luxuriant	$\geq 70\%$

The organisms listed are the minimum that should be used for quality control testing.

Test Procedure

Refer appropriate references for standard test procedures.

Results

Refer appropriate references and procedures for interpretation of results.

Storage

Store the sealed bottle containing the dehydrated medium at 10 - 30°C. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light.

Expiration

Refer to the expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if the appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

Limitations of the Procedure

1. For identification, organisms must be in pure culture. Morphological, biochemical and/or serological tests should be performed for final identification.
2. Consult appropriate texts for detailed information and recommended procedures.

Packaging

Product Name : Standard Nutrient Agar

Product Code : DM625

Available Pack sizes : 500gm

References

1. Greenberg A. E., Trussell R. R. and Clesceri L. S. (Eds.), 1985, Standard Methods for the Examination of Water and Wastewater, 16th ed., APHA, Washington, D.C.
2. Speck M. (Ed.), 1984, Compendium of Methods for the Microbiological Examination of Foods, 2nd ed., APHA, Washington, D.C.
3. Pelczar, Chan and Kreig, 1986, Microbiology, 5th ed., McGraw-Hill Book Company, New York..

Further Information

For further information please contact your local MICROMASTER Representative.





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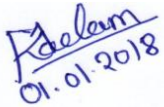


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DM625PSS,QAD/FR/024,Rev.00/01.01.2018

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