



PRODUCT SPECIFICATION SHEET

Wang's Semisolid Medium (DM1015)

Intended Use

Wang's Semisolid Medium (DM1015) is recommended for storage and transportation of *Campylobacter* species.

Product Summary and Explanation

Campylobacter (meaning "curved bacteria") is a genus of Gram-negative, microaerophilic, oxidase-positive, catalase-positive, non-fermentative bacteria. Due to delays in culturing specimens, despite improved techniques isolation of *Campylobacter* species from foods may still be complicated. As a result methods that maintain the viability of *Campylobacter* during transport and storage of specimens are important, especially for specimens that are collected far away from the processing laboratories. Major objective of a transport medium is to maintain the clinical sample as near to their original state as possible with minimum deterioration and to minimize hazards to specimen handlers. This is accomplished by using tightly fitting collection devices confined within proper protective containers.⁽¹⁾ Wang's Medium is an enriched, semisolid medium formulated by Wang,⁽²⁾ as recommended by APHA.⁽³⁾ Wang's Semisolid Medium is used for the transport and storage of cultures of *Campylobacter* species from food such as undercooked meat, poultry, unpasteurised milk, bile and water and can be used for maintenance of *Campylobacter* species.⁽²⁾

Principles of the Procedure

Wang's Semisolid Medium contains casein enzymic hydrolysate and peptic digest of animal tissue, which is a source of nitrogen. Yeast extract provides additional nutritious growth factors. Dextrose is a source of carbon and energy. Sodium bisulphite accelerates growth of organisms. Sodium chloride helps to maintain the osmotic balance. Addition of 0.5% agar makes the medium semisolid for maintaining viability of cultures for transport and storage by providing a semisolid consistency to prevent oxygenation and spillage during transport.⁽¹⁾ Addition of 5-10% defibrinated horse blood provides supplementary source of nutrition for growth.

Formula / Liter

Ingredients	Gms / Liter
Casein enzymic hydrolysate	10.00
Peptic digest of animal tissue	10.00
Dextrose	1.00
Yeast extract	2.00
Sodium chloride	5.00
Sodium bisulphite	0.10
Agar	5.00
Final pH : 7.0 ± 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 33.1 grams of the medium in 900 ml distilled water.
2. Heat to boiling to dissolve the medium completely.
3. Autoclave at 121°C, 15 lbs pressure for 15 minutes / validated cycle.
4. Cool to 45-50°C and aseptically add 100 ml sterile defibrinated sheep blood.
5. Mix well and dispense aseptically in tubes as desired.
6. Allow the tubes to cool in an upright position.



PRODUCT SPECIFICATION SHEET

Quality Control Specifications

Dehydrated Appearance	Cream to yellow homogeneous free flowing powder
Prepared Medium	Medium amber coloured clear solution without any precipitate
Reaction of 3.31% Solution	pH : 7.0 ± 0.2 at 25°C
Gel Strength	Semisolid, comparable with 0.5% Agar gel forms in tubes as butt

Expected Cultural Response: Cultural characteristics observed after an incubation at 35-37°C for 5 days with added sterile defibrinated sheep blood. Growth observed upon subculturing on *Campylobacter* Agar Base (DM054).

Sr. No.	Organisms	Results to be achieved
		Growth
1.	<i>Campylobacter jejuni</i> ATCC 29428	good-luxuriant

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

Test Procedure

Refer to appropriate references for standard test procedures.

Results

Refer to appropriate references 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 : Wang's Semisolid Medium

Product Code : DM1015

Available Pack sizes : 500gm

References

1. Koneman E. W., Allen S. D., Janda W. M., Schreckenberger P. C., Winn W. C. Jr., 1992, Colour Atlas and Textbook of Diagnostic Microbiology, 4th Ed., J. B. Lippincott Company.
2. Wang W. L. L., Luechtefeld N. W., Reller L. B., and Blaser M. J., 1980, J. Clin. Microbiol., 12:479-480.
3. Downes F. P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA, Washington, D.C.



PRODUCT SPECIFICATION SHEET

Further Information

For further information please contact your local MICROMASTER Representative.



MICROMASTER LABORATORIES PRIVATE LIMITED

Unit 38/39, Kalpataru Industrial Estate,
Off G.B. Road, Near 'R-Mall', Thane (W) - 400607. M.S. INDIA.
Ph: +91-9320126789/9833630009/9819991103
Email: sales@micromasterlab.com

DM1015PSS, QAD/FR/024,Rev.00

Disclaimer :

All Products conform exclusively to the information contained in this and other related Micromaster Publications. Users must ensure that the product(s) is appropriate for their application, prior to use. The information published in this publication is based on research and development work carried out in our laboratory and is to the best of our knowledge true and accurate. Micromaster Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are intended for laboratory, diagnostic, research or further manufacturing use only and not for human or animal or therapeutic use, unless otherwise specified. Statements included herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.

