

# Instructions for Use

## CRITERION™ PEPTONE WATER

Cat. no. C6570	CRITERION™ Peptone Water	30gm
Cat. no. C6571	CRITERION™ Peptone Water	500gm
Cat. no. C6572	CRITERION™ Peptone Water	2kg
Cat. no. C6573	CRITERION™ Peptone Water	10kg
Cat. no. C6574	CRITERION™ Peptone Water	50kg

#### INTENDED USE

Hardy Diagnostics CRITERION™ Peptone Water is used for the cultivation of nonfastidious organisms, for performing the indole test, and for studying fermentation patterns.

This dehydrated culture medium is a raw material intended to be used in the making of prepared media products, which will require further processing, additional ingredients, or supplements.

## **SUMMARY**

Peptone Water is useful for the cultivation of non-fastidious organisms. (1) Peptone in the medium supplies nutrients necessary for the growth of those microorganisms. Peptone Water is a minimal media, unsuitable for the growth of fastidious microorganisms, but ideal for use as a basal medium for biochemical tests such as carbohydrate fermentation and indole production. (1,2)

CRITERION<sup>TM</sup> Peptone Water contains peptone as a source of growth nutrients including carbon, nitrogen, vitamins and minerals. Sodium chloride maintains osmotic balance.

## **FORMULA**

Gram weight per liter:	15.0gm/L
Peptone	10.0gm
Sodium Chloride	5.0gm

Final pH 7.2 +/- 0.2 at 25°C.

## STORAGE AND SHELF LIFE

Store the sealed bottle(s) containing dehydrated culture medium at 2-30°C. Dehydrated culture medium is very

<sup>\*</sup> Adjusted and/or supplemented as required to meet performance criteria.

hygroscopic. Keep lid tightly sealed. Protect dehydrated culture media from moisture and light. The dehydrated culture media should be discarded if it is not free-flowing or if the color has changed from its original light tan.

Store the prepared culture media at 2-30°C.

The expiration date on the product label applies to the product in its intact packaging when stored as directed. The product may be used and tested up to the expiration date on the product label and incubated for the recommended incubation times as stated below.

Refer to the document "Storage" for more information.

#### **PRECAUTIONS**

This product may contain components of animal origin. Certified knowledge of the origin and/or sanitary state of the animals does not guarantee the absence of transmissible pathogenic agents. Therefore, it is recommended that these products be treated as potentially infectious, and handle observing the usual universal blood precautions. Do not ingest, inhale, or allow to come into contact with skin.

This product is for laboratory use only. It is to be used only by adequately trained and qualified laboratory personnel. Observe approved biohazard precautions and aseptic techniques. All laboratory specimens should be considered infectious and handled according to "standard precautions." Refer to the document "Guidelines for Isolation Precautions" from the Centers for Disease Control and Prevention.

For additional information regarding specific precautions for the prevention of the transmission of all infectious agents from laboratory instruments and materials, and for recommendations for the management of exposure to infectious disease, refer to CLSI document M29: *Protection of Laboratory Workers from Occupationally Acquired Infections*.

Sterilize all biohazard waste before disposal.

Refer to the document "Precautions When Using Media" for more information.

#### METHOD OF PREPARATION FOR DEHYDRATED CULTURE MEDIA

- 1. Suspend 15.0gm of the dehydrated culture media in 1 liter of distilled or deionized water.
- 2. Heat to and mix to dissolve completely.
- 3. Autoclave at 121°C. for 15 minutes.

#### **For Performing Carbohydrate Fermentation**

- 1. Suspend 15.0gm of the dehydrated culture media in 1 liter of distilled or deionized water.
- 2. Heat and mix to dissolve completely.
- 3. Add 1.8ml 1% phenol red solution to 1 liter of Peptone Water.
- 4. Dispense into tubes containing inverted durham tubes.
- 5. Sterilize in the autoclave at 121°C. for 15 minutes.
- 6. Aseptically add sufficient sterile carbohydrate solution to yield a 1% final concentration. Rotate each tube to thoroughly distribute the carbohydrate.

#### PROCEDURE AND INTERPRETATION OF RESULTS

For information on procedures and interpretation of results, consult listed references or refer to the prepared media Instructions for Use (IFU) for Cat. No. K47.

#### **LIMITATIONS**

It is recommended that biochemical, immunological, molecular, or mass spectrometry testing be performed on colonies from pure culture for complete identification.

Some formulations may require a settling period before pH testing of the prepared medium. If the pH is tested immediately after preparation and is out of specification, retest the medium after 24 hours to obtain final pH results. Always take pH reading at room temperature.

*Vibrio* spp. should not be incubated longer than 18-20 hours. Longer incubation may cause development of suppressed forms. (3)

Refer to the document "Limitations of Procedures and Warranty" for more information.

## MATERIALS REQUIRED BUT NOT PROVIDED

Standard microbiological supplies and equipment such as autoclaves, incinerators, and incubators, etc., are not provided.

#### **QUALITY CONTROL**

Hardy Diagnostics tests each lot of commercially manufactured media using appropriate quality control microorganisms and quality specifications as outlined on the Certificate of Analysis (CofA) and the CLSI document M22-A3 *Quality Assurance for Commercially Prepared Microbiological Culture Media*. The following microorganisms are routinely used for testing at Hardy Diagnostics:

Test Organisms	Inoculation Method*	Incubation			Results			
Test Organisms		Time	Temperature	Atmosphere	Kesuits			
Carbohydrate Fermentation (Peptone Water with added phenol red and carbohydrate)								
Escherichia coli ATCC® 25922	Е	18-24hr	35°C	Aerobic	Growth; media turns yellow, gas positive			
Moraxella catarrhalis ATCC® 25240	E	18-24hr	35°C	Aerobic	Growth; no color change, gas negative			
Growth/Indole Reaction								
Escherichia coli ATCC <sup>®</sup> 25922	Е	18-24hr	35°C	Aerobic	Growth; turns pink to red after adding 4-5 drops of Kovacs Reagent and agitation			
Staphylococcus aureus ATCC® 25923	Е	18-24hr	35°C	Aerobic	Growth; no pink color after adding Kovacs Reagent			

<sup>\*</sup> Refer to the document "Inoculation Procedures for Media OC" for more information.

#### **USER QUALITY CONTROL**

Users of dehydrated culture media should perform QC testing in accordance with applicable government regulatory agencies, and in compliance with accreditation requirements. Hardy Diagnostics recommends end users check for signs of contamination and deterioration and, if dictated by laboratory quality control procedures or regulation, perform quality control testing to demonstrate growth or a positive reaction and to demonstrate inhibition or a negative reaction, if applicable. Hardy Diagnostics quality control testing is documented on the certificate of analysis (CofA) available from Hardy Diagnostics Certificate of Analysis website. In addition, refer to the following document "Finished Product Quality Control Procedures," for more information on QC or see the reference(s) for more specific information.

## PHYSICAL APPEARANCE

CRITERION<sup>TM</sup> Peptone Water powder should appear homogeneous, free-flowing, and light tan in color. The prepared media should appear clear, and light amber in color.

## **REFERENCES**

- 1. MacFaddin, J.F. *Biochemical Tests for Identification of Medical Bacteria*, Lipincott Williams & Wilkins, Philadelphia, PA.
- 2. Jorgensen., et al. Manual of Clinical Microbiology, American Society for Microbiology, Washington, D.C.
- 3. Tille, P., et al. Bailey and Scott's Diagnostic Microbiology, C.V. Mosby Company, St. Louis, MO.

ATCC is a registered trademark of the American Type Culture Collection.

IFU-10229[A]



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**Ordering Information** 

**Distribution Centers:** 

California · Washington · Utah · Arizona · Texas · Ohio · New York · Florida · North Carolina

The Hardy Diagnostics manufacturing facility and quality management system is certified to ISO 13485.

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