

# Instructions for Use

## CRITERION™ EUGONIC BROTH

|                                |                          |        |
|--------------------------------|--------------------------|--------|
| Cat. no. C5720                 | CRITERION™ Eugonic Broth | 60.8gm |
| <a href="#">Cat. no. C5721</a> | CRITERION™ Eugonic Broth | 500gm  |
| Cat. no. C5722                 | CRITERION™ Eugonic Broth | 2kg    |
| Cat. no. C5723                 | CRITERION™ Eugonic Broth | 10kg   |
| Cat. no. C5724                 | CRITERION™ Eugonic Broth | 50kg   |

### INTENDED USE

Hardy Diagnostics CRITERION™ Eugonic Broth is recommended for use as a general purpose growth media for the cultivation of microorganisms.

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

CRITERION™ Eugonic Broth is generally used for the non-selective enrichment of bacteria including fastidious and non-fastidious microorganisms. Bacteria such as *Aspergillus*, *Brucella*, *Candida*, *Lactobacillus*, *Shigella* and *Streptococcus* have been shown to produce eugonic (rapid and luxuriant) growth. This media is useful for cultivation of pathogenic microbes in medical bacteriology as well as enumerating bacteria in food.

Proteose, casein and soy peptones are used in this formula as a source of amino acids, nitrogen, and other essential vitamins. Carbon is available from dextrose, while sodium chloride is added to maintain the proper osmotic pressure. L-cysteine and sodium sulfite are added nutrients in order to improve growth.

### FORMULA\*

|                        |          |
|------------------------|----------|
| Gram weight per liter: | 30.4gm/L |
| Proteose Peptone       | 7.5gm    |
| Casein Peptone         | 7.5gm    |
| Dextrose               | 5.5gm    |
| Soy Peptone            | 5.0gm    |
| Sodium Chloride        | 4.0gm    |
| L-Cysteine             | 0.7gm    |

Final pH 7.0 +/- 0.2 at 25°C.

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

## STORAGE AND SHELF LIFE

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

Store the prepared culture media at 2-8°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 30.4gm of the dehydrated culture media in 1 liter of distilled or deionized water. Stir to mix thoroughly.
2. Boil to dissolve completely. Do not overheat. Dispense in required container.
3. Sterilize in the autoclave at 121°C. for 15 minutes.

## PROCEDURE AND INTERPRETATION OF RESULTS

For information on procedures and interpretation of results, consult listed references.

## 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.

Refer to the document "[Limitations of Procedures and Warranty](#)" for more information.

## MATERIALS REQUIRED BUT NOT PROVIDED

Standard microbiological supplies and equipment such as tubes, inoculation loop or needles, 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 |
|--|---------------------|------------|-------------|------------|---------|
|  |                     | Time       | Temperature | Atmosphere |         |
| <i>Aspergillus brasiliensis</i><br>formerly <i>A. niger</i><br>ATCC® 16404 | A                   | 24-48hr    | 30°C        | Aerobic    | Growth  |
| <i>Candida albicans</i><br>ATCC® 26790                                     | A                   | 24-48hr    | 30°C        | Aerobic    | Growth  |
| <i>Lactobacillus fermentum</i><br>ATCC® 9338                               | A                   | 24-48hr    | 35°C        | Aerobic    | Growth  |
| <i>Shigella flexneri</i><br>ATCC® 12022                                    | A                   | 24-48hr    | 35°C        | Aerobic    | Growth  |
| <i>Streptococcus pyogenes</i><br>ATCC® 19615                               | A                   | 24-48hr    | 35°C        | Aerobic    | Growth  |

\* Refer to the document "[Inoculation Procedures for Media QC](#)" 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™ Eugonic Broth powder should appear homogeneous, free-flowing, and beige in color. The prepared media should appear clear, light amber in color; may have a slight precipitate.

## REFERENCES

1. APHA Technical Committee on Microbiological Methods for Foods. *Compendium of Methods for the*

*Microbiological Examination of Foods*, APHA, Washington, D.C.

2. Anderson, N.L., et al. *Cumitech 3B; Quality Systems in the Clinical Microbiology Laboratory*, Coordinating ed., A.S. Weissfeld. American Society for Microbiology, Washington, D.C.
3. Jorgensen., et al. *Manual of Clinical Microbiology*, American Society for Microbiology, Washington, D.C.
4. American Public Health Association. *Standard Methods for the Examination of Dairy Products*, APHA, Washington, D.C.
5. U.S. Food and Drug Administration. *Bacteriological Analytical Manual*. AOAC, Arlington, VA.  
<http://www.fda.gov/Food/FoodScienceResearch/LaboratoryMethods/ucm2006949.htm>.

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

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[Ordering Information](#)

Distribution Centers:

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

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