IFU

Instructions for Use

CRITERION™ BRILLIANT GREEN AGAR, MODIFIED

Cat. no. C8690	CRITERION™ Brilliant Green Agar, Modified	105.2gm
Cat. no. C8691	CRITERION™ Brilliant Green Agar, Modified	500gm
Cat. no. C8692	CRITERION™ Brilliant Green Agar, Modified	2kg
Cat. no. C8693	CRITERION™ Brilliant Green Agar, Modified	10kg
Cat. no. C8694	CRITERION™ Brilliant Green Agar, Modified	50kg

INTENDED USE

Hardy Diagnostics CRITERION™ Brilliant Green Agar, Modified is recommended for the selective isolation of *Salmonella* spp., other than *S. typhi*, from a variety of specimen types.

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

Brilliant Green Agar, Modified was formulated by Edeland Kamplemacher of the Netherlands Institute for PublicHealth, Utrecht and originally proposed as a selective medium for theisolation of *Salmonella* from pig feces and minced meat.[8,9] The mediumhas been widely assessed in Europe and used in the StandardEuropean Community and by the International StandardsOrganization.[7,10] More selective than Deoxycholate Citrate Agar and other brilliant greenmedia, Brilliant Green Agar, Modified inhibits thegrowth of *Pseudomonasaeruginosa* and *Proteus* spp., which may resemble the growth of *Salmonella* spp., thus reducing the burden of colony identification.

Brilliant Green Agar, Modified is recommended for theselective isolation of *Salmonella* spp., other than *S.typhi*, from clinical and non-clinical specimens. Themedium is appropriate for subculture from selective enrichment media.

FORMULA*

Gram weight per liter:	56.6gm/L
Lactose	10.0gm
Sucrose	10.0gm
Casein Peptone	5.0gm
Animal Tissue Peptone	5.0gm
Gelatin Peptone	5.0gm
Sodium Chloride	5.0gm

Yeast Extract	3.0gm
Disodium Phosphate	1.0gm
Phenol Red	0.09gm
Monopotassium Phosphate	0.52gm
Brilliant Green	4.7mg
Agar	12.0gm

Final pH 6.9 +/- 0.2 at 25ºC.

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

STORAGE AND SHELF LIFE

Store the sealed bottle(s) containing dehydrated culture medium at2-30 degrees C. Dehydrated culture medium is very hygroscopic. Keeplid tightly sealed. Protect dehydrated culture media from moisture andlight. The dehydrated culture media should be discarded if it is notfree-flowing or if the color has changed from its original light beige.

Store the prepared culture media at 2-8ºC.

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 52.6gm of the dehydrated culture media in one liter of distilled or deionized water. Stir to mix thoroughly.

2. Heat to boiling to dissolve completely. Do not overheat.

3. Cool to 45-50ºC. and dispense desired volume into sterile containers.

PROCEDURE AND INTERPRETATION OF RESULTS

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

MATERIALS REQUIRED BUT NOT PROVIDED

Standard microbiological supplies and equipment such as autoclaves, incinerators, and incubators, other culture media such as Buffered Peptone Water (Cat. no. U142), Tetrathionate Broth Base (Cat. no. K65 or U165), as well as supplements, such as Iodine-Iodide Solution (Cat. no. Z129 or Z139), etc., are not provided.

QUALITY CONTROL

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.

Test Organisms	Inoculation Method*	Incubation			Results
		Time	Temperature	Atmosphere	
Salmonella typhimurium ATCC® 14028	A	18-24hr	35°C	Aerobic	Growth; red to pink-white colonies with red zones
Escherichia coli ATCC® 25922	B	18-24hr	35°C	Aerobic	Partial to complete inhibition; small yellow to yellow-green colonies

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

USER 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:

PHYSICAL APPEARANCE

CRITERION™ Brilliant Green Agar, Modified powder should appear homogeneous, free-flowing, and light beige in color. The prepared medium should appear slightly opalescent, and brownish-orange in color.

REFERENCES

1. American Public Health Association. *Standard Methods for the Examination of Water and Wastewater*, APHA, Washington, D.C.

2. APHA Technical Committee on Microbiological Methods for Foods. *Compendium of Methods for the Microbiological Examination of Foods*, APHA, Washington, D.C.

3. Anon. 1975. Meat and meat products - detection of salmonellae (reference method). International Organization for Standardization. Geneva, Switzerland.

4. Anon. 1981. Microbiology - General Guidance on Methods for the Detection of *Salmonella* Ref. method ISO 6579-1981(E). International Organization for Standardization. Geneva, Switzerland.

5. Anon. 2001. Milk and Milk Productss - Detection of *Salmonella* spp. ISO 6785. International Organization for Standardization. Geneva, Switzerland./pr>

6. Atlas, R.M. 2010. *Handbook of Microbiological Media*, 4th ed. CRC Press, Inc. Boca Raton, FL.

7. Corry, J.E.L, G.D.W. Curtis, and R.M. Baird. 2003. *Handbook of Culture Media for Microbiology*. Elsevier Science B.V. Amsterdam, The Netherlands.

8. Edel, W. and E.H. Kamplemacher. 1968. Comparative studies on Salmonella isolation in eight European laboratories. *Bull. Wld. Hlth. Org*.;39:487-491.

9. Edel, W. and E.H. Kamplemacher. 1969. *Salmonella* infections in nine European lanoratories using a standard technique. *Bull. Wld. Hlth. Org*.; 41:297-306.

10. Parry, P.T., L. Haysom, N.L. Thomas, and R. Davis.1982. *A Manual of Recommended Methods for the Microbiological Examination of Poultry and Poultry Products*. British Poultry Meat Association. London, U.K.

11. Read, JR., R.B. and A.L. Reyes. 1968. Variation in plating efficiency of salmonellae on eight lots of Brilliant Green Agar. *Appl. Microbiol*; 16(5):746-748.

12. Reed, G.H. 1993. Foodborne illness (Part 2): Salmonellosis. Dairy, Food, Environ. *San* 13:706.

13. Vassilliadis, P, J. Trichopoulos, V.K. Papadakis and Ch. Serie. 1979. Brilliant Green Deoxycholate Agar as an improved selective medium for the isolation of *Salmonella*. *Ann. Soc. belge. Med. trop*.; 59:117-120.

IFU-10128[B]

1430 West McCoy Lane, Santa Maria, CA 93455, USA
Phone: (805) 346-2766 ext. 5658
Fax: (805) 346-2760
Website: HardyDiagnostics.com
Email: TechnicalServices@HardyDiagnostics.com
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.

HDQA 2207B [D]