

# **CRITERION™ GELATIN**

Cat. no. C7920	CRITERION™ Gelatin	100gm
Cat. no. C7921	CRITERION™ Gelatin	500gm
Cat. no. C7922	CRITERION™ Gelatin	2kg
Cat. no. C7923	CRITERION™ Gelatin	10kg
Cat. no. C7924	CRITERION™ Gelatin	50kg

# **INTENDED USE**

Hardy Diagnostics CRITERION<sup>™</sup> Gelatin is recommended for use in the preparation of culture media for microbiological purposes.

This 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**

Gelatin is used in some food products to enhance the texture and cohesiveness of the product as well as an ingredient in solid culture media. It is a protein derived from collagen hydrolysis and generally stiffens or congeals the prepared solution. Collagen is found in skin, bones, tendons and the cartilage of animals. In microbiology, gelatin is commonly used in concentrations of ten to twenty percent in order to solidify media for growing different species of microorganisms. This is not an ideal situation due to a melting point of 28 to 30°C., which is significantly lower than the optimum temperature to grow bacteria.

Robert Koch was the first to use gelatin in 1875 and discovered the ability of certain bacteria to liquify the solid gelatin at room temperature. The enzymes responsible for this were later discovered to be gelatinases; the purpose of these proteolytic enzymes is to break down large molecules so they can be brought into the cell to be metabolized. The ability to liquify gelatin is characteristic of certain Enterobacteriaceae such as *Proteus* species and *Serratia* species.

## 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 light beige.

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 "<u>Guidelines for Isolation</u> <u>Precautions</u>" 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.

# MATERIALS REQUIRED BUT NOT PROVIDED

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

#### PHYSICAL APPEARANCE

CRITERION<sup>TM</sup> Gelatin powder should appear homogeneous, free-flowing, and light beige in color.

#### REFERENCES

1. Gershenfeld, Louis and Linwood F. Tice. 1941. Gelatin for Bacteriological Use. Journal of Bacteriology; 41: 645.

2. MacFaddin, J.F. 1985. *Media for Isolation, Cultivation, Identification, Maintenance of Bacteria*, Vol. I. Williams & Wilkins, Baltimore, MD.

3. Howard, B.J., et al. 1997. Clinical and Pathogenic Microbiology, 2nd ed. Mosby, St. Louis, MO.

4. Isenberg, H.D. *Clinical Microbiology Procedures Handbook*, Vol. I, II & III. American Society for Microbiology, Washington, D.C.

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#### Website: <u>HardyDiagnostics.com</u> <u>Email: TechnicalServices@HardyDiagnostics.com</u> <u>Ordering Information</u>

Distribution Centers:

 $California \cdot Washington \cdot Utah \cdot Arizona \cdot Texas \cdot Ohio \cdot New York \cdot Florida \cdot North Carolina$ 

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

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