

Gelatin (NCM0204)

Intended Use

Gelatin is a protein source and solidifying agent for use in preparing microbiological culture media in a laboratory setting. Gelatin is not intended for use in the diagnosis of disease or other conditions in humans.

Description

Gelatin is a protein of uniform molecular constitution derived chiefly by the hydrolysis of collagen. Collagens are a class of albuminoids found abundantly in bones, skin, tendons, cartilage and similar animal tissues. Koch introduced gelatin into bacteriology when he invented the gelatin tube method in 1875 and the plate method in 1881. This innovation, a solid culture method, became the foundation for investigating bacterial growth. Gelatin-based media were soon replaced by media containing agar as the solidifying agent.

Gelatin is used in culture media for determining gelatinolysis (elaboration of gelatinases) by bacteria. Several media containing gelatin are specified in standard methods for multiple applications.

Precaution

Refer to SDS

Quality Control Specifications

Dehydrated Appearance: Homogeneous flakes, free-flowing and very light yellow to yellow-beige.

Prepared Appearance: Prepared medium is very light to light yellow, clear to moderately hazy, with none to light precipitate.

Physical and Chemical Characteristics

Identification	Meets USP/NF-Ph.Eur.
pH (1% solution)	3.8 to 7.6
Conductivity	≤ 1000 μS/cm
Sulfur dioxide	≤ 50 ppm
Peroxides	≤ 10 ppm
Bloom	265 – 285 GMS
Iron	≤ 30 ppm
Chromium	≤ 10 ppm
Zinc	≤ 30 ppm
LOD	≤ 15%

Microbiological Characteristics

Standard Plate Count	≤ 1000 cfu /g
<i>Salmonella</i> / 25g	Negative
<i>E. coli</i> / 25g	Negative
Yeast and Mold	< 100 cfu /g

Test Procedure

Refer to appropriate references for specific procedures using Gelatin.

Results

Refer to appropriate references for test results.

Technical Specification Sheet



Expiration

Refer to expiration date stamped on the container. The product should be discarded if it is not free flowing, or if medium has changed from the original color. Expiry applies to product in its intact container when stored as directed.

Storage

Store product at 2-30°C away from direct sunlight. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.

References

1. Gershenfeld, L., and L. F. Tice. 1941. Gelatin for bacteriological use. *J. Bacteriol.* 41:645-652
2. www.fda.gov/Food/ScienceResearch/LaboratoryMethods/BacteriologicalAnalyticalManualBAM/default.htm.
3. Eaton, A. D., L. S. Clesceri, and A. E. Greenberg (eds.). 2017. Standard methods for the examination of water and wastewater, 23rd ed., American Public Health Association, Washington, D.C.

Effective Date: 5/24/2019

Revision: 0



620 Leshar Place • Lansing, MI 48912
800-234-5333 (USA/Canada) • 517-372-9200
foodsafety@neogen.com • foodsafety.neogen.com

PI-NCM0204 Page 2 of 2