Technical Specification Sheet



Malt Extract (NCM0207)

Intended Use

Malt Extract is a dehydrated extract of malt for use in preparing microbiological culture media in a laboratory setting. Malt Extract is not intended for use in the diagnosis of disease or other conditions in humans.

Description

Malt Extract is a clarified, water-soluble extract of malted barley. Malt Extract is a useful ingredient of culture media designed for the propagation of yeasts and molds. This ingredient is suitable for yeasts and molds because it contains a high concentration of carbohydrates, particularly maltose. The approximate percentage of reducing sugars in Malt Extract is 60 - 63%. The high carbohydrate content makes malt extract very sensitive to overheating which results in darkening of the medium it is used in. Malt Extract is generally employed in culture media at concentrations between 10 to 100 grams per liter.

Malt Agar, a medium recommended for the detection and isolation of yeast and molds from dairy products, food, and as a stock culture, contains Malt Extract. Wort Agar, used for the cultivation and enumeration of yeasts, has Malt Extract as one of the main ingredients in the formula. Several media containing Malt Extract are specified in standard methods.

Precaution

Refer to SDS

Quality Control Specifications

Dehydrated Appearance: Powder is homogeneous, free-flowing and light beige to tan.

Prepared Appearance (2% wt/vol): Prepared medium is clear to brilliant with or without a slight precipitate and light to dark amber.

Chemical Composition:

CAS #:	8002-48-0
Moisture:	< 6.0%
pH (2% Solution):	5.0 – 7.0

Microbiological Specifications:

Standard Plate Count: < 5000 CFU / g

Growth Supporting Properties:

Malt Agar: Satisfactory

Test Procedure

Refer to appropriate references for specific procedures using Malt Extract.

Results

Refer to appropriate references for test results.

Expiration

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



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Storage

Store dehydrated 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. Vanderzant, C., and D. F. Splittstoesser (eds.). 2015. Compendium of methods for the microbiological examination of food., 4th ed. American Public Health Association, Washington, D.C.
- 2. Marshall, R. T. (ed.). 2004. Standard methods for the microbiological examination of dairy products, 17th ed. American Public Health Association, Washington, D.C.
- 3. www.fda.gov/Food/ScienceResearch/LaboratoryMethods/BacteriologicalAnalytical manualBAM/ default.htm.