

MALACHITE GREEN C.I. 42000

IVD In vitro diagnostic medical device

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Malachite Green Oxalate, Basic Green 4, Victoria Green, BSC certified dye For staining bacterial spores

INSTRUCTIONS FOR USE

REF Product code: MAG-P-10 (10 g)

MAG-P-25 (25 g)

Introduction

Histology, cytology and other related scientific disciplines study the microscopic anatomy of tissues and cells. In order to achieve a good tissue and cellular structure, the samples need to be stained in a correct manner. Malachite Green powder dye is intended for microscopy staining using different methods. It is most commonly used in differential staining of bacterial spores at heightened temperature. Red contrasting dye is used for better visualization. Used in Gimenez stain for *Rickettsia* species and *Helicobacter pylori*. Also used as a fluorescent stain in bacterial infections. Also used as a counterstain for determining acid-fast bacteria.

Product description

• MALACHITE GREEN - Biological Stain Commission (BSC) certified powder dye for preparing the solution for staining bacterial

Preparing the dye solution

Malachite Green powder solution:

- Dissolve 5 g of Malachite Green powder dye in distilled/demineralized water
- Fill the rest of the 100 ml container with distilled/demineralized water

Results

Bacterial spores - green Cellular material - red

Note

The mentioned formulation is only one of the ways of preparing the dye solution. The Malachite Green dye is the most commonly used dye for staining bacterial spores. Depending on personal requests and standard laboratory operating procedures, the dye solution can be prepared according to other protocols.

Preparing the sample and diagnostics

Use only appropriate instruments for collecting and preparing the samples. Process the samples with modern technology and mark them clearly. Follow the manufacturer's instructions for handling. In order to avoid mistakes, the staining procedure and diagnostics should only be conducted by authorized and qualified personnel. Use only microscope according to standards of the medical diagnostic laboratory. In order to avoid an erroneous result, a positive and negative check is advised before application.

Safety at work and environmental protection

Handle the product in accordance with safety at work and environmental protection guidelines. Used solutions and out of date solutions should be disposed of as special waste in accordance with national guidelines. Chemicals used in this procedure could pose danger to human health. Tested tissue specimens are potentially infectious. Necessary safety measures for protecting human health should be taken in accordance with good laboratory practice. Act in accordance with signs and warnings notices printed on the product's label, as well as in BioGnost's material safety data sheet.

Storing, stability and expiry date

Keep the Malachite Green powder dye in a tightly closed original package at temperature between 15°C and 25°C. Keep in dry places, do not freeze and avoid exposure to direct sunlight. Expiry date is stated on the product's label.

References

- 1. Conn, J. (1977): Biological Stains, 9^{th} ed. Baltimore: Williams and Wilkins Co.
- 2. Thomas Gessner and Udo Mayer (2002): Triarylmethane and Diarylmethane Dyes, Ullmann's Encyclopedia of Industrial Chemistry, Wiley-VCH, Weinheim.
- 3. Lillie, R.D. Conn's Biological Stains, Williams & Wilkins, Baltimore, MD., U.S.A.
- 4. Gurr, E., (1971): Synthetic dyes in biology, medicine and chemistry, Academic Press, London, England.

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<u> </u>	Refer to the supplied documentation	°C 🌓 °C	Storage temperature range	\sum	Number of tests in package	REF	Product code	CE	European Conformity	***	BIOGNOST Ltd. Medjugorska 59 10040 Zagreb	(ϵ
(Ji	Refer to supplied instructions	*	Keep away from heat and sunlight		Valid until	LOT	Lot number	***	Manufacturer		CROATIA www.biognost.com		
IVD	For <i>in vitro</i> diagnostic use only	*	Keep in dry place	4	Caution - fragile					=			