

BIOCLEAR NEW

IVD In vitro diagnostic medical device



Aliphatic hydrocarbons-based xylene substitute INSTRUCTIONS FOR USE

REF Catalog number: BCN-1L (1000 ml) BCN-5L (5000 mL) BCN-10L (10000 mL)

Introduction

BioClear New is xylene substitute used as clearing agent. Clearing agents are completely miscible with alcohol and paraffin which makes them an ideal intermedium between alcohol and embedding paraffin (BioWax), as well as alcohol and section mounting agent. Beside xylene, the standard clearing agent, aliphatic hydrocarbons-based xylene substitutes are more and more frequently used (such as BioClear New); they are weakly reactive and low toxic. They are not irritable and do not cause hypersensitivity. Results of clearing using them are comparable to results of using xylene. BioClear New can be used with every tissue processing device and automated slide stainers. Adequately dehydrated and cleared tissue sample becomes transparent and appropriate for microscopic analysis. Using BioClear New will not make tissue samples too solid, and it is characterized by quick tissue infiltration and efficient removal of fatty tissues.

Product description

- **BIOCLEAR NEW** – aliphatic hydrocarbons-based reagent, xylene substitute used in clearing process.

Product use

- BioClear New is intermedium between alcohol and embedding paraffin (BioWax), as well as alcohol and permanent section covering agent.
- BioClear New is used with staining and processing procedures of sections, microscope sections, cytology smears and histopathology samples.
- As a part of sample processing procedure, BioClear New is used to remove alcohol from the sample and infiltrate/immerse the sample with paraffin (BioWax PLUS 56/58).
Note: the sample is treated with BioClear New mixed with alcohol and it is gradually being removed from the sample, while BioClear New remains in it. The sample is then treated with paraffin. It gradually removes BioClear New in a similar way and infiltrates/immerses the sample.
- After clearing (as a part of the sample processing and paraffin infiltration), the sample is ready for microtome cutting, followed by slide staining.
- As a part of the slide staining procedure, BioClear New is used for removing the paraffin from the slide and infiltration/immersion of the slide using alcohol (Histanol 70, Histanol 80, Histanol 95, Histanol 100).

Recommended procedure for removing paraffin from the section (deparaffination):

Deparaffinize the section in xylene substitute (BioClear New)	3 exchanges, 2 min each
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Note: the sample is treated with BioClear New mixed with paraffin and it is gradually being removed from the sample, while BioClear New remains in the sample. The slide is then treated using alcohol (series of ascending concentrations) that removes BioClear New from the slide in the same way and dehydrates the slide.

- Clear the sections using BioClear medium after staining; the section must be covered afterwards.

Recommended procedure for section clearing:

Clear the section in xylene substitute (BioClear New)	2 exchanges, 2 min each
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- Samples treated with BioClear New agent must be covered/mounted using an aliphatic carbohydrate-based medium, such as BioMount New.

Result

The result of sample clearing (part of the sample processing procedure) is high quality and complete infiltration/immersion of the sample with paraffin, enabling easy and high quality sample cutting sample using microtome and cutting it into strips.

The result of slide clearing (part of the sample staining) is sample dehydration using series of alcohols of ascending concentrations, enabling complete sample covering and preparing the slide for analysis.

Note

Depending on personal preferences and standard operating laboratory procedures, period of clearing using BioClear New may vary. BioClear New may cause sample/slide damage if the exposure lasts for too long.

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

BioClear New (xylene substitute) should be stored at temperature between +15°C and +25°C. Do not keep in cold places, do not freeze and avoid exposing to direct sunlight. Expiry date is stated on the product's label.

References

1. Carson, F. L. (2007), Histotechnology, 2nd ed. Singapore
2. Cook, D. J. (2006): Cellular pathology, 2nd ed. Banbury: Scion Publishing Ltd.
3. Kiernan J. A. (2008) Histological and histochemical methods, 4th ed. Bloxham: Scion Publishing Ltd.

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	Refer to the supplied documentation		Storage temperature range		Number of tests in package		Product code		European Conformity
	Refer to supplied instructions		Keep away from heat and sunlight		Valid until		Lot number		Manufacturer
	For in vitro diagnostic use only		Keep in dry place		Caution - fragile				

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