

# BIOCLEAR NEW

IVD In vitro diagnostic medical device



## Aliphatic hydrocarbon-based xylene substitute INSTRUCTIONS FOR USE

REF Product code: BCN-1L (1000 mL)

### Introduction

It is done as a part of the sample processing procedure and slide staining procedure. Clearing agents are used as an intermedium for mixing alcohol with the paraffin wax for embedding (BioWax) and resin alcohol/covering gel. They should be soluble in dehydrating and infiltrating medium. Many types of xylene substitutes are used for clearing. Aliphatic hydrocarbons are the newest clearing compounds. They have low reactivity and weak toxicity and are a part of the group of components such as propane, butane and paraffin wax. They are not irritant and do not cause hypersensitivity. Results of clearing using aliphatic hydrocarbons are comparable to results of using xylene or even better. Aliphatic hydrocarbons 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 of the slide.

### Product description

- **BIOCLEAR NEW** - Mild aliphatic hydrocarbon-based clearing agent that does not make tissues samples hard. Its properties include fast infiltration into tissues and efficient fat removal. Samples treated with BioClear New agent must be covered/mounted using an aliphatic carbohydrate-based medium, such as BioMount New.

### Product use

- BioClear New is a clearing agent and it is used as an intermedium for mixing alcohol with the paraffin embedding wax and alcohol with resins/covering gels.
- BioClear New is used in sample processing procedure and staining slides, microscope sections, cytologic and histopathologic smears.
- 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).

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 it. 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.

- After clearing as a part of the slide staining procedure and dehydration, the sample then undergoes the covering procedure.

### Result

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

The result of slide clearing (part of the sample staining) is a simplified and high quality sample dehydration using series of alcohols of ascending concentrations, enabling high quality 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. Samples treated with BioClear New agent must be covered/mounted using an aliphatic carbohydrate-based medium, such as BioMount New.

### 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 taken care of as a 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, 2<sup>nd</sup> ed. Singapore
2. Cook, D. J. (2006): Cellular pathology, 2<sup>nd</sup> ed. Banbury: Scion Publishing Ltd.
3. Kiernan J. A. (2008) Histological and histochemical methods, 4<sup>th</sup> ed. Bloxham: Scion Publishing Ltd.

Instructions BCN-1L version 1 30 September 2013 Approved by: AK

	Refer to the supplied documentation		Temperature range		Number of tests in package		Product code		European Conformity
	Refer to supplied instructions		Keep away from heat and sunlight		Do not reuse		Lot number		Manufacturer
	For <i>in vitro</i> diagnostic purpose only		Keep in dry place		Caution - fragile		Valid until		

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