Immersion Oil

(for *In Vitro* Diagnostic use only)

PRODUCT CODE: PL.396

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INTENDED USE
For use in microscopic examination of prepared slides from clinical specimens.

SUMMARY AND EXPLANATION
In light microscopy, oil immersion is a technique used to increase the resolution of a microscope. This is achieved by both the objective lens and the specimen being covered in a transparent oil of high refractive index, thereby increasing the numerical aperture of the objective lens.
The study of cells and cellular structure using standard light microscopy is limited in terms of magnification. In microbiological microscopy this is improved with the use of oil immersion lenses that offer magnification up to x1000 for example for bacterial cells, protozoa and fungal elements.

PRINCIPLE OF THE TEST
Image quality is of paramount importance and is directly related to the optical properties of the immersion oil used. Immersion Oil has the same refractive index as the glass used in the manufacture of glass microscopy slides. This increases the resolution between the oil immersion lens and the specimen slide by replacing the air between the lens and the slide, easing the spread of light at the same speed as in glass, and hence avoiding image distortion.
Immersion Oil has a refractive index equalling that of glass which guarantees clear images. There is no residual fluorescence, making it suitable for both light and fluorescent microscopy. This also limits common phenomena such as achromatism, spherical aberration and field flatness. It is free from Dibutyl Phthalate (DBP) and has reduced hazards (non-teratogenic).

MATERIALS PROVIDED
- PL.396 Immersion Oil 50ml

MATERIALS REQUIRED BUT NOT PROVIDED
- Glass Slides
- Stains

STABILITY AND STORAGE
Immersion Oil should be kept at 15-25ºC in the original container. Product stored under these conditions will be stable until the expiry date shown on the product label.

PRECAUTIONS
- For *In Vitro* Diagnostic Use only.
- For professional use only.
- Directions should be read and followed carefully.
- Do not use beyond the stated expiration dates.
- Microbial contamination may decrease the accuracy of the staining.
- Safety precautions should be taken in handling, processing and discarding all clinical specimens.
- Samples should be processed in the correct containment level conditions.
- Dispose of all material in accordance with local regulations.

SAMPLE STORAGE AND COLLECTION
n/a

TEST PROCEDURE
1. Focus on the specimen using a dry objective lens (x40), making sure that the specimen is central in the view.
2. Move the dry objective to one side and pace a drop of Immersion Oil on top of the specimen. Move the oil immersion lens into place, ensuring that it makes contact with the oil drop.
3. View the specimen, making any fine adjustments to obtain the best image.
4. After use it is important to clean the oil from the lens using a soft tissue.

QUALITY CONTROL PROCEDURE
Internal quality control of the Immersion Oil must be performed regularly on known reference material. A selection of quality control slides is available; please see the Pro-Slide™ range.

INTERPRETATION OF RESULTS
Follow laboratory guidelines.

LIMITATIONS OF THE PROCEDURE
- Only experienced personnel should carry out the interpretation of stained slides.
- Read prepared slides as soon as possible after staining. Failure to do so may affect the results.
- Immersion Oil has an optimum refractive index at 23ºC. This means that while the product will perform as described and remain stable if stored between 15ºC and 25ºC, samples will be visualised most clearly if the oil is stored at 23ºC.

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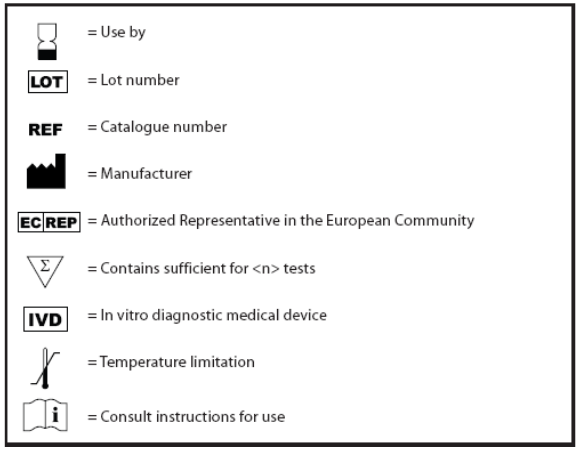

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HAZARDS IDENTIFICATION

	PL.396	Classification (EC 1272/2008) NC Not Classified.

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