

# TRY THE DRY

## 100X DRY INFINITY PLAN OBJECTIVE

Our new 100x DRY Infinity PLAN objective will bring a radical change in the world of microscopy. With clarity, resolution and flat-field-of-view that rivals the best 100x OIL Infinity PLAN objectives, why use oil?

- Never buy immersion oil again
- Never wipe oil off a slide
- Never clean oil off your fingers or your microscope stage
- Never clean oil off of the 100x objective
- Never drag a 40x objective through the oil
- Increase efficiency and speed scanning slides



**J0334D100P**



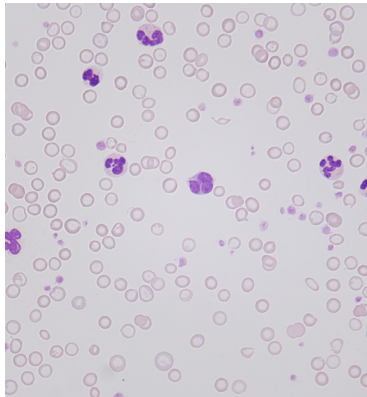
**J0334IB2**

Imagine how quickly doctors and techs can scan cytology slides without ever slowing down; plus think of their satisfaction and relief after so many years of struggling with oil. Our dry objective installs onto any LW Scientific microscope and can also be installed onto other microscope brands as referenced on the Microscope Objective Compatibility Chart on page 2.

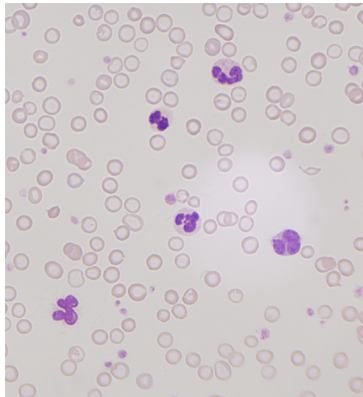
Many customers won't believe it. After decades of practice and protocol, doctors assume oil is a necessity. If they see it, they will believe it! TRY the DRY!

### TRY THE DRY

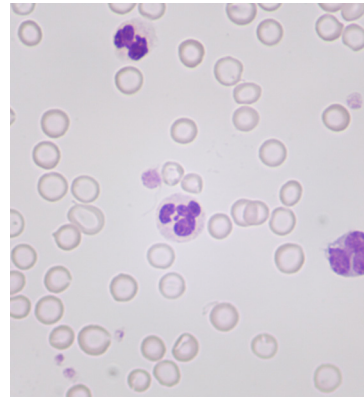
100x DRY and 60x DRY objectives for customers who are tired of using oil



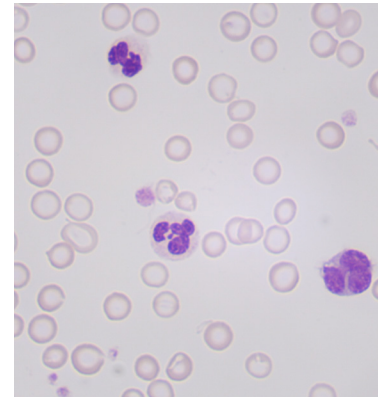
**50x OIL**



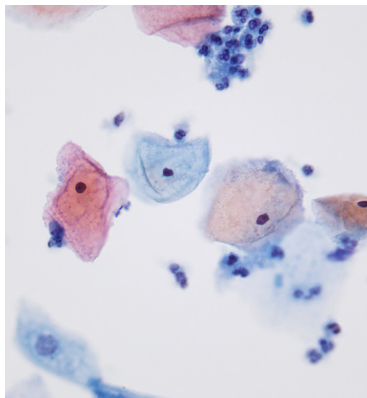
**60x DRY**



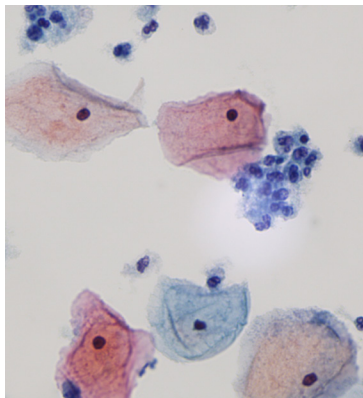
**100x DRY**



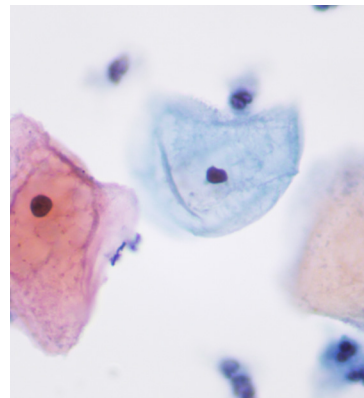
**100x OIL**



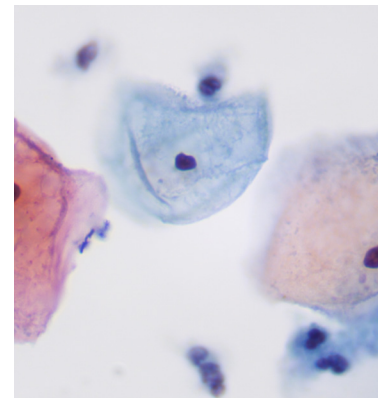
**50x OIL**



**60x DRY**



**100x DRY**



**100x OIL**

#### How does the 100x DRY work?

The new 100x DRY objective is unique because the numerical aperture is reduced, similar to the NA of a 40x DRY objective. With a numerical aperture of 0.85 and a working distance of 0.72mm, the steepest angles of light are eliminated therefore reducing refraction and producing a clear image. The 100x DRY image is 95% as sharp as a 100x OIL image.

*TIP: For clinical and educational users, the 100x DRY objective is an amazing alternative to the dreaded OIL objectives.*

## Why use OIL?

Traditionally as magnification is increased, numerical aperture is increased as well. This means the angle of light entering the objective is steeper, and the working distance is shorter. A standard 100x OIL objective usually has a very short working distance of 0.16mm and a numerical aperture of 1.25 NA. With high magnification and steep angles of light entering the objective, refraction causes a greater loss of resolution, so immersion oil is used between the specimen and the objective to increase the resolving power and reduce refraction. Immersion oil has a similar refractive index to glass, and as it eliminates the layer of air between specimen and objective the highest resolution is achieved.

**TIP:** For the most discerning cytologists in the lab using the most expensive microscopes, a 100x OIL objective is a necessity, and a 50x OIL objective is the ultimate for high resolution scanning.



## 100X DRY SPECIFICATIONS

<b>Magnification</b>	100x
<b>Working Distance</b>	0.72mm
<b>Parfocal Length</b>	45mm
<b>Numerical Aperture</b>	0.85 NA
<b>Optical System</b>	Infinity (also works on DIN160 systems)
<b>Flat Field Correction</b>	PLAN
<b>Threading</b>	Standard RMS (20.4mm)

## 50X OIL SPECIFICATIONS

<b>Magnification</b>	50x
<b>Working Distance</b>	0.19mm
<b>Parfocal Length</b>	45mm
<b>Numerical Aperture</b>	0.95 NA
<b>Optical System</b>	Infinity (also works on DIN160 systems)
<b>Flat Field Correction</b>	PLAN
<b>Threading</b>	Standard RMS (20.4mm)

## 60X DRY SPECIFICATIONS

<b>Magnification</b>	60x
<b>Working Distance</b>	0.24mm
<b>Parfocal Length</b>	45mm
<b>Numerical Aperture</b>	0.8 NA
<b>Optical System</b>	Infinity (also works on DIN160 systems)
<b>Flat Field Correction</b>	PLAN
<b>Threading</b>	Standard RMS (20.4mm)



P 800.525.5614  
F 970.663.5042

1450 Van Buren Ave  
Loveland, Colorado 80538

JorVet.com

## Microscope Objective Compatibility Chart

Brand	Model	Optical System	Thread Size	Parfocal Length	Adapter Needed?
LW Scientific	i4 Infinity	Infinity	RMS (20.4mm)	45mm	None
LW Scientific	Innovation	Infinity	RMS (20.4mm)	45mm	None
LW Scientific	Mi5	Infinity	RMS (20.4mm)	45mm	None
LW Scientific	Revelation III	DIN160	RMS (20.4mm)	45mm	None
Nikon	Eclipse Models (e100/e200)	Infinity	M25 (25mm)	60mm	RMS to M25, +15mm (J0334ARN)
Nikon	Older models >10 years	DIN160	RMS (20.4mm)	45mm	None
Olympus	Most models	Infinity	RMS (20.4mm)	45mm	None
Leica	Newer models <10 years	Infinity	M25 (25mm)	45mm	RMS to M25 (J0334ARL)
Meiji	All models	Either	RMS (20.4mm)	45mm	None
Zeiss	Clinical Models	Infinity	RMS (20.4mm)	45mm	None
Unico	All models	Either	RMS (20.4mm)	45mm	None
Accuscope	All models	Either	RMS (20.4mm)	45mm	None
Swift	All models	Either	RMS (20.4mm)	45mm	None
Labomed	All models	Either	RMS (20.4mm)	45mm	None