



LeaTeam.com

828.926.6525



Leading Edge Associates, LLC

www.LeaTeam.com 828.926.6525 info@LeaTeam.com

450 Brannon Forest Dr, Waynesville NC 28785

What is DropVision®?

DropVision® is a droplet measuring system designed to analyze droplet spectra through image analysis of droplets contained on Teflon and magnesium oxide coated slides.

What are the components of DropVision®?

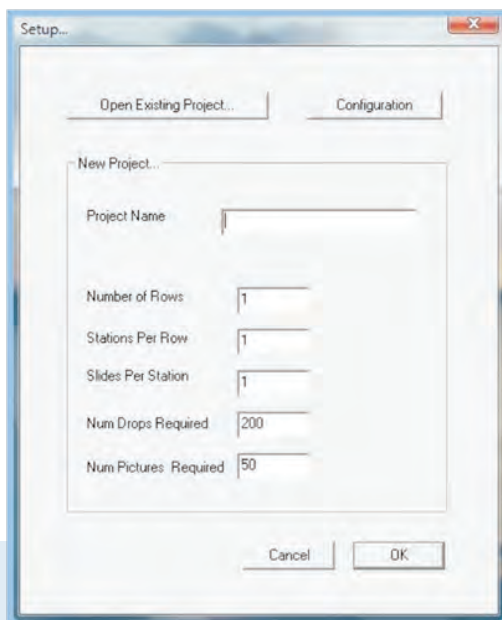
DropVision® consists of a specialized high eye-point compound microscope with a built-in hi-res digital imaging processor; **DropVision®** Advanced Droplet Image Analysis software; and the **DropVision®** Graphing & Reporting software.

How does DropVision® work?

Using conventional sampling techniques such as 1" Teflon slide wave, field spinning impingers or other recognized droplet sampling techniques, a sample slide is exposed to the aerosol cloud and placed on the microscope's mechanical stage. **DropVision®** electronically captures images contained on the slide, analyzing each droplet while eliminating any background objects, coalesced droplets or non-qualified droplets. This is accomplished by utilizing advanced proprietary image analysis algorithms.

Is DropVision® more efficient than manually reading slides?

Reading slides manually averages thirty-minutes for complete analysis of two-hundred (200) drops. **DropVision®** reads two-thousand droplets (2,000), produces the graphs and reports at an average rate of thirty-seconds, depending on the droplet densities on the slides.



Does DropVision® Analyze & Report the new EPA label language?

Yes. **DropVision®** provides the user with the new and current label language requirement standards. **DropVision®** specifically incorporates DV.1, DV.5, DV.9, droplet densities per millimeter squared and relative span.

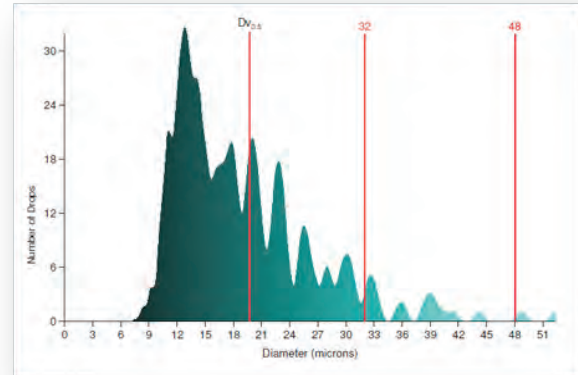
Does DropVision® analyze more than one slide?

Yes. **DropVision®** can analyze one slide or multiple slides from multiple locations. **DropVision®** accommodates a single slide analysis or an unlimited number of slides and locations. This makes **DropVision®** very unique and capable of analyzing a slide for a single ULV fogger or aircraft calibration or a complex network of droplet measuring stations in a wide area ULV ground or aerial application.



How Accurate is DropVision®?

Results of a statistical analysis of DropVision® compared to the conventional human eye-read method were analyzed and they were found to be comparable. It should be noted that DropVision® through the proprietary image analysis algorithms measures droplet sizes as small as one pixel. This advanced and unmatched measuring technique produces a more precise and accurate measurement of droplet sizes as compared to conventional methods.

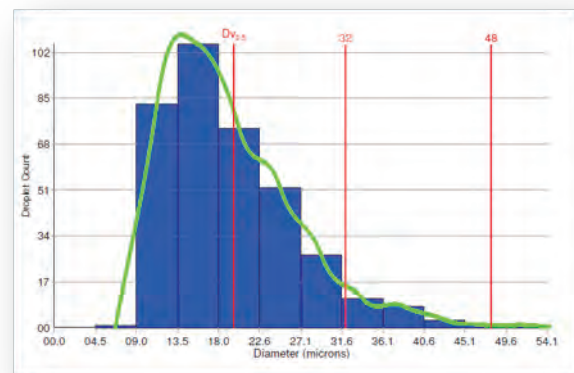


What Output Data is produced by DropVision®?

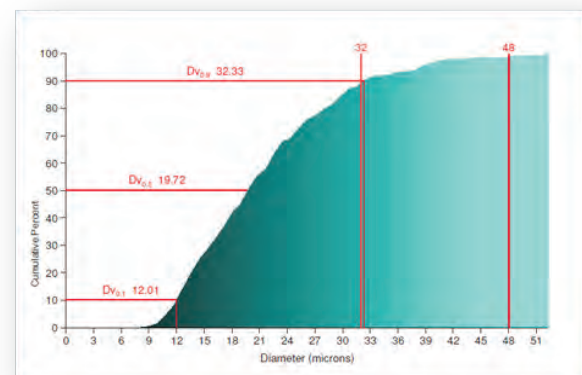
The standard DropVision® Graphing and Reporting software automatically produces the following reports.

Does DropVision® Produce an Excel¹ or Compatible File?

Yes. DropVision® produces a comma delimited ASCII text file that is easily imported into Microsoft¹ Excel for further analysis. Each field of information is labeled and simple to interpret.



¹ Excel and Microsoft are trademarks of Microsoft Corporation



Dibrom-JB-020509-Rep1
DV_{0.5} (VMD): 19.72 microns
DV_{0.1}: 12.01 microns
DV₉₉: 32.33 microns
Relative Span: 1.03
Total Droplets Collected: 366
Droplets over 32 microns: 23
Droplets over 48 microns: 5



The Comparison of Conventional Droplet Measurement Techniques & DropVision® Chart

| Features | DropVision | DC-III | Malvern | Manual |
|---|------------|--------|---------|--------|
| Portable | Yes | Yes | No | Yes |
| Analyze Ground Spraying Equipment | Yes | Yes | No | Yes |
| Analyze Aerial Spraying Equipment in field | Yes | No | No | Yes |
| Automatically analyzes droplet spectrum | Yes | Yes | Yes | No |
| Analyses and Reports Federal EPA requirements including DV _{.1} , DV _{.5} , DV _{.9} & cumulative percentages below label requirement | Yes | Yes | Yes | No |
| Produces PDF file of all reports | Yes | No | No | No |
| Produces an Excel file | Yes | No | No | No |
| Requires equipment and cleaning materials to be transported to the spray equipment in the field | No | Yes | N/A | No |
| Equipment can be used for other tasks such as mosquito identification, insect identification, image capturing, video production, education | Yes | No | No | No |
| Analyze user selectable unlimited number of slides | Yes | No | Yes | No |
| Easier to operate than other products | Yes | No | No | No |
| Produces useful graphs for analysis | Yes | No | Yes | No |
| Produces comma delimited ASCII file | Yes | No | Yes | No |
| Compiles hundreds of slides into one summary or individually | Yes | No | No | No |

*DC-III Hotwire is a product of KLD
Malvern is a product of Malvern Industries
Excel is a trademark of Microsoft
PDF is a trademark and product of Adobe*