

Oculyze Bio Ethanol can be used on any PC or modern iPad. Please go to the WebApp (webapp.oculyze.net) and log in with your user account before starting.



microscope



cables



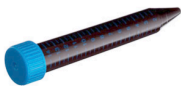
measuring cylinder



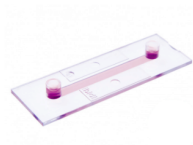
pasteur pipette



reaction tube



methylene violet



sample chamber



syringe



cleaning bellows



cleaning swab

1. DILUTION

Note that based on the density of your yeast sample, more or less dilution will be needed. If measuring during an ongoing fermentation, dilution is often not necessary. For highly concentrated yeast at inoculation or repitching a 1:100 dilution is a good starting point. **We will use a 1:100 dilution in this example:**

What you will need: measuring cylinder, water, pasteur pipette, a yeast sample from your fermenter or propagator

Step 1: fill your measuring cylinder with 99ml of water

Step 2: fill your pasteur pipette with 1ml of yeast and empty it into the measuring cylinder

Step 3: run the solution in and out of the pipette three times to make sure it is completely empty

Step 4: take the pasteur pipette and stir vigorously – now it's diluted!

2. STAINING (only required when measuring viability)

What you will need: diluted yeast sample, pasteur pipette, reaction tube, methylene violet

Step 1: fill the pasteur pipette with 0.5ml of your diluted yeast sample

Step 2: take the 0.5ml of the diluted yeast sample and put it into the reaction tube

Step 3: take 0.5ml of the methylene violet solution and put it into the reaction tube

Step 4: run the mixture through the pipette a few times

QUICK GUIDE

3. LOADING THE CHAMBER

What you will need: diluted (and stained) yeast sample, pasteur pipette, sample chamber

Step 1: fill the pasteur pipette with a small amount of your diluted (and stained) sample

Step 2: pipette the sample into either one of the chamber openings

Step 3: let the capillary forces pull the sample through the chamber

Step 4: leave it for approx. 5 minutes to let the yeast cells settle and the staining react

4. MEASURING

What you will need: microscope, PC or iPad, chamber loaded with diluted (and stained) yeast sample

Taking the images

Step 1: connect the microscope via cable to your PC or iPad and open the Bio Ethanol WebApp

Step 2: put the chamber into the microscope and slide it up to its first marking

Step 3: in the app select "single analysis" choose whether you want a measurement with or without viability

Step 4: now adjust the focus wheel of the microscope until you see a sharp image on your mobile device

Step 5: take the picture with the button under the live view to add the image to the analysis

Step 6: release the focus wheel a bit to move the chamber to the next marking to take the next image

Step 7: repeat the steps above to take 5 images total

Performing the analysis

Step 1: after you took 5 images, enter a name for your sample (date & time are filled automatically)

Step 2: enter the ratio for dilution and staining (in this example this would be 1:99 and 1:1)

Step 3: add a comment if you like, i.e. sample origin, yeast type, generation of yeast, etc.

Step 4: click "next" to perform the analysis and to review your results

5. CLEANING THE CHAMBER (should be done shortly after the analysis)

What you will need: dirty chamber, distilled water, syringe, bellows, paper tissue

Step 1: fill the syringe with distilled water and rinse the chamber with it

Step 2: use the cleaning bellows to gently blow air through the chamber

Step 3: use the paper tissue to collect the remaining water from the chamber openings

Step 4: (optional) repeat step 1 to 3 with diluted detergent if water doesn't clean it well enough with just water

Support:

success@oculyze.net
+49 151 / 6171 7961

Oculyze Automation GmbH, Regattastr. 183, 12527 Berlin, Germany

