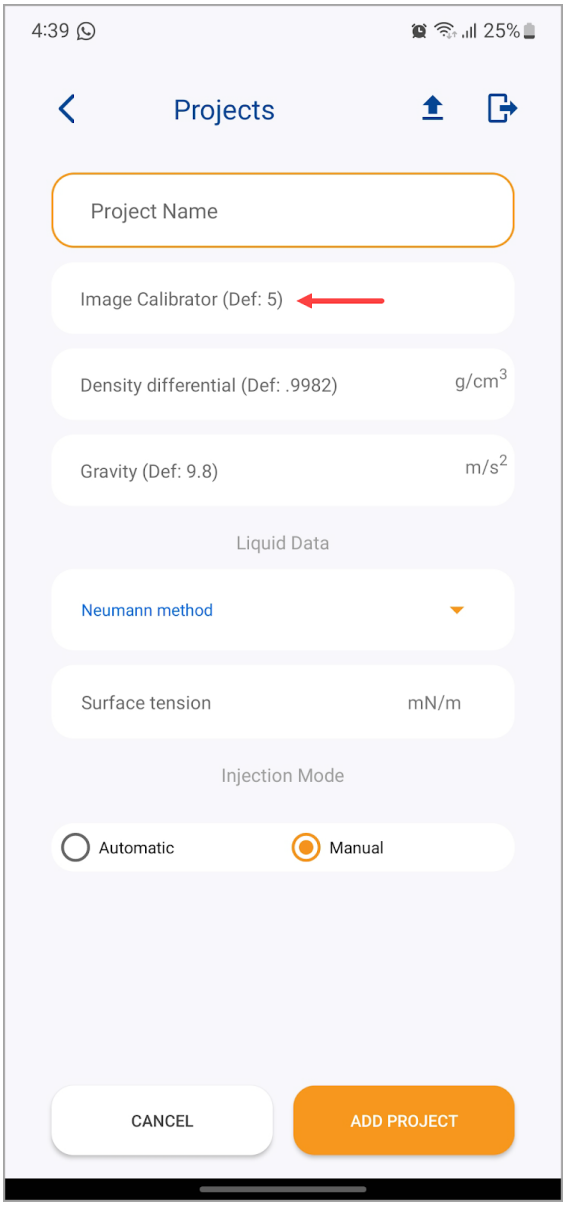
Which Calibrations are needed for Measurement?

Calibration Process · https://dropletlab.com/knowledge-doc/which-calibrations-are-needed-for-measurement/

In order to ensure smooth contact angle measurement, a number of calibrations are needed. However, they are only needed if you are using the Young-Laplace method. They include:

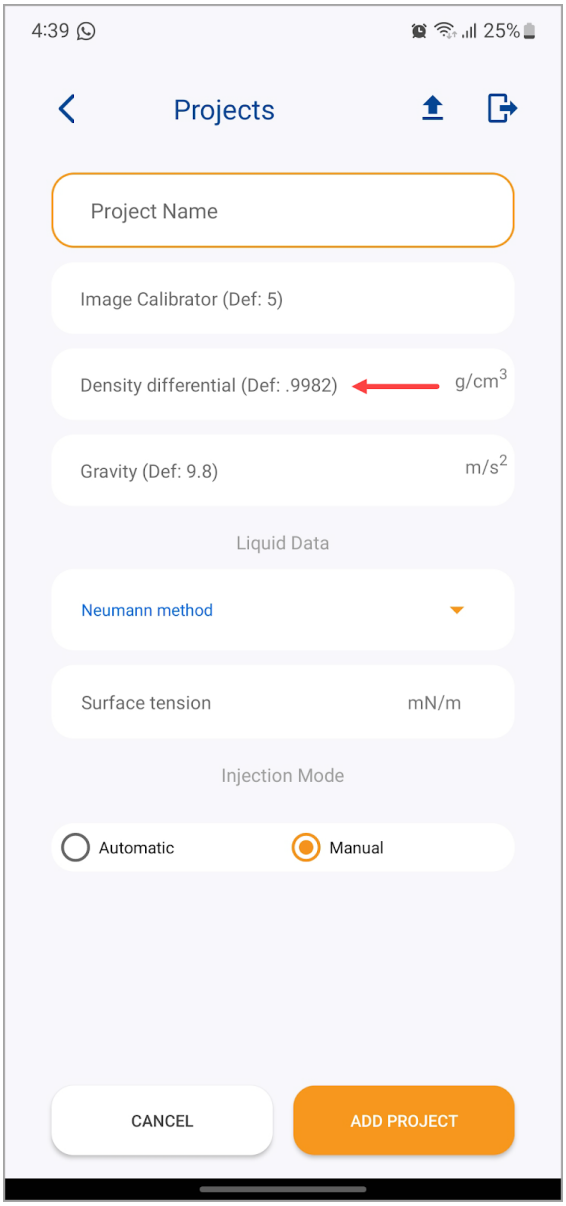
Image Calibration Number

Image calibrator is defined as the outside diameter of the needle you are using for measurement. It is recommended to measure the needle diameter with a micrometer prior to starting the experiment.



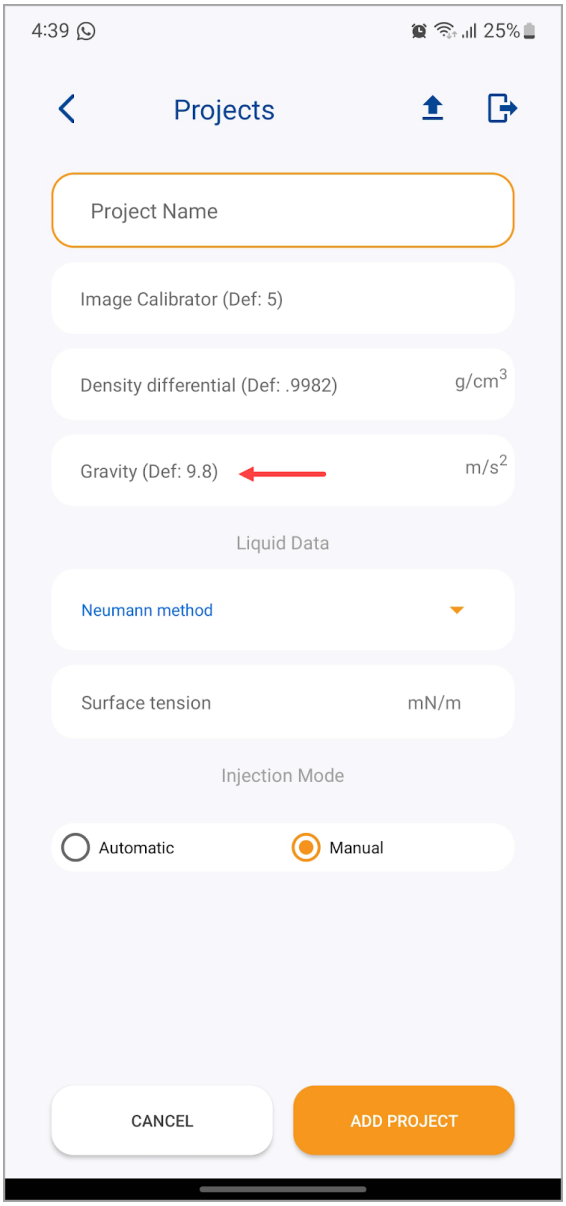
Density Differential

Density differential is defined as the difference between the density of the liquid and the one of its outer gas or liquid. For instance, if you are performing an experiment that includes water and air, you can leave the density differential to its default value. Talking about the experiments that include liquid and liquid (water and oil), the density differential is the difference between the density of oil being used and the density of water.



Acceleration of Gravity

The acceleration of gravity is set to its default value i.e. 9.8 m/s². Use negative values for gravity when doing experiments with buoyancy.


4:39
25%
Projects
Project Name
Image Calibrator (Def: 5)
Density differential (Def: .9982)
g/cm3
Gravity (Def: 9.8)
m/s2
Liquid Data
Neumann method
Surface tension
mN/m
Injection Mode
Automatic
Manual
CANCEL
ADD PROJECT