



Starter Lab Supply List

Original & Final Gravity

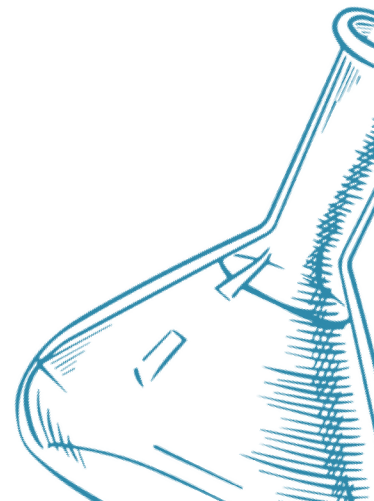
- Hydrometer (SG or °Plato) or Digital Density Meter
- Thermometer
- Graduated cylinder, 100 mL
- DI water
- Optional: wash bottle

pH

- pH meter: +/- 0.02 precision, ATC, 2+ calibration points (ideally at least pH 4 and pH 7)
- pH electrode:
 - Best quality: glass, double junction, refillable, with ATC
 - Cheapest recommended: epoxy, double junction, gel, with separate temperature probe
- Stir plate
- Stir bars
- Beakers, 100 mL
- pH buffers: pH 4 and pH 7 (optional: pH 10)
- pH storage solution: 3.5M KCl
- pH refill solutions: see electrode manual for correct solution
- DI Water
- Wash bottle
- Optional: pH electrode cleaning solutions (see manufacturer recommendation for removing protein deposits)

Diacetyl Force Test

- Hot water bath: some options below
 - Hot plate with a glass beaker
 - Sous vide in a tub/pot/bucket
- Sealable container, heat tolerable: some options below
 - 50 mL centrifuge tube
 - Lab bottle
- Thermometer



A blue line drawing of a molecular structure, showing several spheres of varying sizes connected by lines, representing atoms and bonds.

Starter Lab Supply List

Continued

Cell Count & Viability

- Microscope: 3+ objective lenses for total magnification of 40x, 100x, and 400x
- Hemocytometer: improved Neubauer-style
- Hemocytometer cover slip (these are heavier than a normal cover slip)
- Isopropanol, 70% or higher
- Lint-free wipes (Kim Wipes is a common brand)
- Methylene blue, 0.01%
- Stir plate
- Stir bars
- Beakers, 100 mL
- Graduated cylinder, 100 mL
- Volumetric pipet, 1 mL
- Transfer pipets, finely tipped
- Optional: 50 mL centrifuge tubes may be useful for the 50:50 methylene blue dilution.
- Optional: clicker cell counter
- Optional: calculator

Shelf Stability

- Shelf
- Optional: fridge
- Optional: incubator or hot box

